
**AMENDED AND RESTATED
MASTER INSTALLMENT PURCHASE AGREEMENT**

by and between the

CITY OF SAN DIEGO

and the

SAN DIEGO FACILITIES AND EQUIPMENT LEASING CORPORATION

Dated as of January 1, 2009

Relating To

**INSTALLMENT PAYMENTS PAYABLE FROM
NET SYSTEM REVENUES OF
THE WATER UTILITY FUND
OF THE CITY OF SAN DIEGO, CALIFORNIA**

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AMENDED AND RESTATED
MASTER INSTALLMENT PURCHASE AGREEMENT

This AMENDED AND RESTATED MASTER INSTALLMENT PURCHASE AGREEMENT (the "Installment Purchase Agreement"), made and entered into as of January 1, 2009, by and between the CITY OF SAN DIEGO, a municipal corporation organized and existing under a charter duly adopted pursuant to the provisions of the Constitution of the State of California (the "City"), and the SAN DIEGO FACILITIES AND EQUIPMENT LEASING CORPORATION, a nonprofit public benefit corporation duly organized and existing under and by virtue of the laws of the State of California (the "Corporation"),

WITNESSETH:

WHEREAS, the City proposes to undertake the acquisition, construction, installation and improvement of its water system (the "Water System") as more fully described in Exhibit A hereof and as modified from time to time (the "Project" and, initially, the "1998 Project");

WHEREAS, the Corporation has agreed to assist the City by financing the construction of the Project for the City;

WHEREAS, the City has determined that its purchase of improvements to the Water System by undertaking the Project is necessary and proper for City uses and purposes;

WHEREAS, the Corporation proposes to sell components of the Project from time to time to the City and the City desires to purchase components of the Project from the Corporation upon the terms and conditions set forth herein;

WHEREAS, since the date upon which the Master Installment Purchase Agreement was initially executed by the City and the Corporation, being August 1, 1998 (the "Original MIPA"), the City and the Corporation, with the prior written consent of the appropriate Credit Providers (as defined herein), entered into certain supplements thereto, the effect of which was to amend certain substantive provisions of the Original MIPA (collectively, the "Amendatory Supplements"); and

WHEREAS, the Amendatory Supplements were entered into in full compliance with the provisions of Section 10.03(a) of the Original MIPA; and

WHEREAS, the City and the Corporation have determined for administrative purposes to consolidate the Amendatory Supplements with the Original MIPA and to make certain clarifications and corrections to the Original MIPA in connection therewith; and

WHEREAS, the City and the Corporation have duly authorized the execution of this Installment Purchase Agreement;

WHEREAS, all acts, conditions and things required by law to exist, to have happened and to have been performed precedent to and in connection with the execution and delivery of this Installment Purchase Agreement do exist, have happened and have been performed in

regular and due time, form and manner as required by law, and the parties hereto are now duly authorized to execute and enter into this Installment Purchase Agreement;

NOW, THEREFORE, IN CONSIDERATION OF THESE PREMISES AND OF THE MUTUAL AGREEMENTS AND COVENANTS CONTAINED HEREIN AND FOR OTHER VALUABLE CONSIDERATION, THE PARTIES HERETO DO HEREBY AGREE AS FOLLOWS:

ARTICLE I

DEFINITIONS

SECTION 1.01. Definitions. Unless the context otherwise requires, the terms defined in this Section shall for all purposes hereof and of any amendment hereof or supplement hereto and of any report or other document mentioned herein or therein have the meanings defined herein, all of the following definitions shall be equally applicable to both the singular and plural forms of any of the terms defined herein:

Accountant's Report

The term "Accountant's Report" means a report signed by an Independent Certified Public Accountant.

Acquisition Fund

The term "Acquisition Fund" means the fund by that name established pursuant to any Issuing Instrument.

Adjusted Debt Service

The term "Adjusted Debt Service" means, for any Fiscal Year, Debt Service on Parity Obligations for such Fiscal Year, minus an amount equal to earnings from investments in any Reserve Fund securing Parity Obligations for such Fiscal Year.

Adjusted Net System Revenues

The term "Adjusted Net System Revenues" means, for any Fiscal Year, the Net System Revenues for such Fiscal Year, minus an amount equal to earnings from investments in any Reserve Fund securing Parity Obligations for such Fiscal Year.

Authorized City Representative

The term "Authorized City Representative" means the Chief Financial Officer of the City or such other officer or employee of the City or other person who has been designated in writing as such representative by the Chief Financial Officer.

Authorizing Ordinance

The term “Authorizing Ordinance” means the ordinance pursuant to which this Installment Purchase Agreement was authorized and any additional ordinance or official authorizing act of the council of the City approving execution and delivery of any Supplement to this Installment Purchase Agreement or any Issuing Instrument.

Balloon Indebtedness

The term “Balloon Indebtedness” means, with respect to any Series of Obligations twenty-five percent (25%) or more of the principal of which matures on the same date or within a 12-month period (with sinking fund payments on Term Obligations deemed to be payments of matured principal), that portion of such Series of Obligations which matures on such date or within such 12-month period; provided, however, that to constitute Balloon Indebtedness the amount of indebtedness maturing on a single date or over a 12-month period must equal or exceed 150% of the amount of such Series of Obligations which matures during any preceding 12-month period. For purposes of this definition, the principal amount maturing on any date shall be reduced by the amount of such indebtedness which is required, by the documents governing such indebtedness, to be amortized by prepayment or redemption prior to its stated maturity date.

Bond Counsel

The term “Bond Counsel” means a firm of attorneys which is nationally recognized in the area of municipal finance selected by the City.

Capacity Charge

The term “Capacity Charge” means a charge imposed upon a person, firm, corporation or other entity incident to the granting of a permit for a new water connection or due to an increase in water usage by the addition of any type of dwelling, commercial or industrial unit, which charge is based upon an increase in water consumption as measured by equivalent dwelling units, and the proceeds of which are used to construct, improve and expand the Water System to accommodate the additional business of such added dwellings or commercial or industrial units.

Charter

The term “Charter” means the Charter of the City as it now exists or may hereafter be amended, and any new or successor Charter.

City

The term “City” means the City of San Diego, a municipal corporation organized and existing under the Charter and the Constitution of the State of California.

Code

The term “Code” means the Internal Revenue Code of 1986, and the regulations thereunder, as amended, and any successor provisions of law.

Components

The term “Components” means components of the Project specified on Exhibit A or in a Supplement.

Consultant

The term “Consultant” means the consultant, consulting firm, engineer, architect, engineering firm, architectural firm, accountant or accounting firm retained by the City to perform acts or carry out the duties provided for such consultant in this Installment Purchase Agreement. Such consultant, consulting firm, engineer, architect, engineering firm or architectural firm shall be nationally recognized within its profession for work of the character required. Such accountants or accounting firm shall be independent certified public accountants licensed to practice in the State of California.

Comptroller

The term “Comptroller” means the Comptroller of the City.

Corporation

The term “Corporation” means the San Diego Facilities and Equipment Leasing Corporation, a nonprofit public benefit corporation duly organized and existing under and by virtue of the laws of the State.

Credit Provider

The term “Credit Provider” means any municipal bond insurance company, bank or other financial institution or organization which is performing in all material respects its obligations under any Credit Support Instrument for some or all of the Parity Obligations.

Credit Provider Reimbursement Obligations

The term “Credit Provider Reimbursement Obligations” means obligations of the City to repay, from Net System Revenues, amounts advanced by a Credit Provider as credit support or liquidity for Parity Obligations, which obligations shall constitute Parity Obligations or Subordinated Obligations, as designated by the City.

Credit Support Instrument

The term “Credit Support Instrument” means a policy of insurance, a letter of credit, a standby purchase agreement, revolving credit agreement or other credit arrangement pursuant to

which a Credit Provider provides credit support or liquidity with respect to the payment of interest, principal or the purchase price of any Parity Obligations.

Debt Service

With regard to the issuance of Parity Obligations, the term “Debt Service” means, for any Fiscal Year, the sum of (a) the interest payable during such Fiscal Year on all Outstanding Parity Obligations, assuming that all Outstanding Serial Parity Obligations are retired as scheduled and that all Outstanding Term Parity Obligations are redeemed or paid from sinking fund payments as scheduled (except to the extent that such interest is to be paid from the proceeds of sale of any Parity Obligations), (b) that portion of the principal amount of all Outstanding Serial Parity Obligations maturing on the next succeeding principal payment date which falls in such Fiscal Year (excluding Serial Obligations which at the time of issuance are intended to be paid from the sale of a corresponding amount of Parity Obligations), (c) that portion of the principal amount of all Outstanding Term Parity Obligations required to be redeemed or paid on any redemption date which falls in such Fiscal Year (together with the redemption premiums, if any, thereon); provided that, (1) as to any Balloon Indebtedness, Tender Indebtedness and Variable Rate Indebtedness, interest thereon shall be calculated as provided in the definition of Maximum Annual Debt Service and principal shall be deemed due at the nominal maturity dates thereof; (2) the amount on deposit in a debt service reserve fund on any date of calculation of Debt Service shall be deducted from the amount of principal due at the final maturity of the Parity Obligations for which such debt service reserve fund was established and in each preceding year until such amount is exhausted; and (3) the amount of payments on account of Parity Obligations which are redeemed, retired or repaid on the basis of the accreted value due on the scheduled redemption, retirement or repayment date shall be deemed principal payments, and interest that is compounded and paid as part of the accreted value shall be deemed payable on the scheduled redemption, retirement or repayment date, but not before.

With regard to the issuance of Subordinated Obligations, the term “Debt Service” means, for any Fiscal Year, the sum of (a) the interest payable during such Fiscal Year on all Outstanding Obligations, assuming that all Outstanding Serial Obligations are retired as scheduled and that all Outstanding Term Obligations are redeemed or paid from sinking fund payments as scheduled (except to the extent that such interest is to be paid from the proceeds of sale of any Obligations), (b) that portion of the principal amount of all Outstanding Serial Obligations maturing on the next succeeding principal payment date which falls in such Fiscal Year (excluding Serial Obligations which at the time of issuance are intended to be paid from the sale of a corresponding amount of other Obligations) (c) that portion of the principal amount of all Outstanding Term Obligations required to be redeemed or paid on any redemption date which falls in such Fiscal Year (together with the redemption premiums, if any, thereon) provided that, (1) as to any Balloon Indebtedness, Tender Indebtedness and Variable Rate Indebtedness, interest thereon shall be calculated as provided in the definition of Maximum Annual Debt Service and principal shall be deemed due at the nominal maturity dates thereof; (2) the amount on deposit in a Reserve Fund on any date of calculation of Debt Service shall be deducted from the amount of principal due at the final maturity of the Obligations for which such Reserve Fund was established and in each preceding year, until such amount is exhausted; and (3) the amount of payments on account of Obligations which are redeemed, retired or repaid on the basis of the accreted value due on the scheduled redemption, retirement or repayment date shall be deemed

principal payments, and interest that is compounded and paid as part of the accreted value thereof shall be deemed payable on the scheduled redemption, retirement or repayment date, but not before.

Default Rate

The term “Default Rate” means the Maximum Rate.

Defaulted Obligations

The term “Defaulted Obligations” means Obligations in respect of which an Event of Default has occurred and is continuing.

Engineer’s Report

The term “Engineer’s Report” means a report signed by an Independent Engineer.

Event of Default

The term “Event of Default” means any occurrence or event described in Section 8.01 hereof.

Feasibility Report

The term “Feasibility Report” means a report of a Consultant with special expertise on the construction and operation of water systems similar to the Water System, delivered in connection with the incurrence of Additional Obligations.

Fiscal Year

The term “Fiscal Year” means the period beginning on July 1 of each year and ending on the next succeeding June 30, or any other twelve-month period selected and designated as the official Fiscal Year of the City.

Independent Certified Public Accountant

The term “Independent Certified Public Accountant” means any firm of certified public accountants appointed by the City, and each of whom is independent pursuant to the Statement on Auditing Standards No. 1 of the American Institute of Certified Public Accountants.

Independent Engineer

The term “Independent Engineer” means any registered engineer or firm of registered engineers of national reputation generally recognized to be well qualified in engineering matters relating to water systems, appointed and paid by but not under the control of the City.

Installment Payment Date

The term “Installment Payment Date” means any date on which an Installment Payment is due as specified herein or determined pursuant to a Supplement.

Installment Payments

The term “Installment Payments” means the Installment Payments scheduled to be paid by the City under and pursuant hereto and any Supplement.

Installment Payment Obligations

The term “Installment Payment Obligations” means Obligations consisting of or which are supported in whole by Installment Payments.

Installment Purchase Agreement

The term “Installment Purchase Agreement” means this Amended and Restated Master Installment Purchase Agreement, by and between the City and the Corporation, dated as of January 1, 2009, as originally executed and as it may from time to time be amended or supplemented in accordance herewith.

Issuing Instrument

The term “Issuing Instrument” shall mean any indenture, trust agreement, loan agreement, lease, installment purchase agreement or this Installment Purchase Agreement, including any Supplement or other instrument under which Obligations are issued or created.

Law

The term “Law” means the Charter and all applicable laws of the State.

Maintenance and Operation Costs of the Water System

The term “Maintenance and Operation Costs of the Water System” means (a) any Qualified Take or Pay Obligation, and (b) the reasonable and necessary costs spent or incurred by the City for maintaining and operating the Water System, calculated in accordance with generally accepted accounting principles, including, without limitation, the costs of the purchase, delivery or storage of water, the reasonable expenses of maintenance and repair and other expenses necessary to maintain and preserve the Water System in good repair and working order, and including administrative costs of the City attributable to the Water System, including the Project and this Installment Purchase Agreement, salaries and wages of employees of the Water System, payments to such employees’ retirement systems (to the extent paid from System Revenues), overhead, taxes (if any), fees of auditors, accountants, attorneys or engineers and insurance premiums, and including all other reasonable and necessary costs of the City or charges required to be paid by it to comply with the terms of the Obligations, including this Installment Purchase Agreement, including any amounts required to be deposited in the Rebate Fund pursuant to a Tax Certificate, and fees and expenses payable to any Credit Provider (other

than in repayment of a Credit Provider Reimbursement Obligation), but excluding in all cases (1) depreciation, replacement and obsolescence charges or reserves therefor, (2) amortization of intangibles or other bookkeeping entries of a similar nature, (3) costs of capital additions, replacements, betterments, extensions or improvements to the Water System which under generally accepted accounting principles are chargeable to a capital account or to a reserve for depreciation, (4) charges for the payment of principal of and interest on any general obligation bond heretofore or hereafter issued for Water System purposes, and (5) charges for the payment of principal of and interest on any debt service on account of any Obligation on a parity with or subordinate to the Installment Payments.

Maximum Annual Debt Service

The term "Maximum Annual Debt Service" means,

(A) with respect to Parity Obligations then Outstanding, the maximum amount of principal and interest becoming due on the Parity Obligations in the then-current or any future Fiscal Year, calculated by the City or by an Independent Certified Public Accountant in accordance with this subsection and provided to the Trustee. For purposes of calculating Maximum Annual Debt Service, the following assumptions shall be used to calculate the principal and interest becoming due in any Fiscal Year:

(i) in determining the principal amount due in each Fiscal Year, payments shall (except to the extent a different subsection of this definition applies for purposes of determining principal maturities or amortization) be assumed to be made in accordance with any amortization schedule established for such debt, including the amount of any Parity Obligations which are or have the characteristics of commercial paper and which are not intended at the time of issuance to be retired from the sale of a corresponding amount of Parity Obligations, and including any scheduled mandatory redemption or prepayment of Parity Obligations on the basis of accreted value due upon such redemption or prepayment, and for such purpose, the redemption payment or prepayment shall be deemed a principal payment; provided, however, that with respect to Parity Obligations which are or have the characteristics of commercial paper and which are intended at the time of issuance to be retired from the sale of a corresponding amount of other Obligations, which other Obligations would not constitute Balloon Indebtedness, each maturity thereof shall be treated as if it were to be amortized in substantially equal installments of principal and interest over a term of 30 years, commencing in the year of such stated maturity; in determining the interest due in each Fiscal Year, interest payable at a fixed rate shall (except to the extent subsection (A)(ii) or (iii) of this definition applies) be assumed to be made at such fixed rate and on the required payment dates;

(ii) if all or any portion or portions of an Outstanding Series of Parity Obligations constitute Balloon Indebtedness or if all or any portion or portions of a Series of Parity Obligations or such payments then proposed to be issued would constitute Balloon Indebtedness, then, for purposes of determining Maximum Annual Debt Service, each maturity which constitutes Balloon Indebtedness shall

be treated as if it were to be amortized in substantially equal annual installments of principal and interest over a term of 30 years, commencing in the year the stated maturity of such Balloon Indebtedness occurs, the interest rate used for such computation shall be determined as provided in subsection (A)(iv) or (v) below, as appropriate, and all payments of principal and interest becoming due prior to the year of the stated maturity of the Balloon Indebtedness shall be treated as described in subsection (A)(i) above;

(iii) if any Outstanding Series of Parity Obligations constitutes Tender Indebtedness or if Parity Obligations proposed to be issued would constitute Tender Indebtedness, then for purposes of determining Maximum Annual Debt Service, Tender Indebtedness shall be treated as if the principal amount of such Parity Obligations were to be amortized in accordance with the amortization schedule set forth in the Supplement or Issuing Instrument for such Tender Indebtedness or in the standby purchase or liquidity facility established with respect to such Tender Indebtedness, or if no such amortization schedule is set forth, then such Tender Indebtedness shall be deemed to be amortized in substantially equal annual installments of principal and interest over a term of 30 years commencing in the year in which such Series is first subject to tender, the interest rate used for such computation shall be determined as provided in subsection (A)(iv) or (v) below, as appropriate;

(iv) if any Outstanding Series of Parity Obligations constitutes Variable Rate Indebtedness, the interest rate on such Obligations shall be assumed to be 110% of the daily average interest rate on such Parity Obligations during the 12 months ending with the month preceding the date of calculation, or such shorter period that such Parity Obligations shall have been Outstanding;

(v) if Parity Obligations proposed to be issued will be Variable Rate Indebtedness, then such Parity Obligations shall be assumed to bear interest at 80% of the average Revenue Bond Index during the calendar quarter preceding the calendar quarter in which the calculation is made, or if that index is no longer published, another similar index selected by the City, or if the City fails to select a replacement index, an interest rate equal to 80% of the yield for outstanding United States Treasury bonds having an equivalent maturity, or if there are no such Treasury bonds having such maturities, 100% of the lowest prevailing prime rate of any of the five largest commercial banks in the United States ranked by assets; and

(vi) if moneys or Permitted Investments have been deposited by the City into a separate fund or account or are otherwise held by the City or by a fiduciary to be used to pay principal of and/or interest on specified Parity Obligations, then the principal and/or interest to be paid from such moneys, Permitted Investments or from the earnings thereon shall be disregarded and not included in calculating Maximum Annual Debt Service.

(B) with regard to all Obligations then Outstanding, the maximum amount of principal and interest becoming due on the Obligations in the then-current or any future Fiscal Year, calculated by the City or by an Independent Certified Public Accountant in accordance with this subsection and provided to the Trustee. For purposes of calculating Maximum Annual Debt Service, the following assumptions shall be used to calculate the principal and interest becoming due in any Fiscal Year:

(i) in determining the principal amount due in each Fiscal Year, payments shall (except to the extent a different subsection of this definition applies for purposes of determining principal maturities or amortization) be assumed to be made in accordance with any amortization schedule established for such debt, including the amount of any Obligations which are or have the characteristics of commercial paper and which are not intended at the time of issuance to be retired from the sale of a corresponding amount of Obligations, and including any scheduled mandatory redemption or prepayment of Obligations on the basis of accreted value due upon such redemption or prepayment, and for such purpose, the redemption payment or prepayment shall be deemed a principal payment; provided, however, that with respect to Obligations which are or have the characteristics of commercial paper and which are intended at the time of issuance to be retired from the proceeds of sale of a corresponding amount of other Obligations, and which would not constitute Balloon Indebtedness, each maturity thereof shall be treated as if it were to be amortized in substantially equal installments of principal and interest over a term of 30 years, commencing in the year of such stated maturity; in determining the interest due in each Fiscal Year, interest payable at a fixed rate shall (except to the extent subsection (B)(ii) or (iii) of this definition applies) be assumed to be made at such fixed rate and on the required payment dates;

(ii) if all or any portion or portions of an Outstanding Series of Obligations constitute Balloon Indebtedness or if all or any portion or portions of a Series of Obligations or such payments then proposed to be issued would constitute Balloon Indebtedness, then, for purposes of determining Maximum Annual Debt Service, each maturity which constitutes Balloon Indebtedness shall be treated as if it were to be amortized in substantially equal annual installments of principal and interest over a term of 30 years, commencing in the year the stated maturity of such Balloon Indebtedness occurs, the interest rate used for such computation shall be determined as provided in subsection (B)(iv) or (v) below, as appropriate, and all payments of principal and interest becoming due prior to the year of the stated maturity of the Balloon Indebtedness shall be treated as described in subsection (B)(i) above;

(iii) if any Outstanding Series of Obligations constitutes Tender Indebtedness or if Obligations proposed to be issued would constitute Tender Indebtedness, then for purposes of determining Maximum Annual Debt Service, Tender Indebtedness shall be treated as if the principal amount of such Obligations were to be amortized in accordance with the amortization schedule set forth in the Supplement or Issuing Instrument for such Tender Indebtedness or

in the standby purchase or liquidity facility established with respect to such Tender Indebtedness, or if no such amortization schedule is set forth, then such Tender Indebtedness shall be deemed to be amortized in substantially equal annual installments of principal and interest over a term of 30 years, commencing in the year in which such Obligations are first subject to tender, the interest rate used for such computation shall be determined as provided in subsection (B)(iv) or (v) below, as appropriate;

(iv) if any Outstanding Series of Obligations constitute Variable Rate Indebtedness, the interest rate on such Series of Obligations shall be assumed to be 110% of the daily average interest rate on such Series of Obligations during the 12 months ending with the month preceding the date of calculation, or such shorter period that such Series of Obligations shall have been Outstanding;

(v) if Obligations proposed to be issued will be Variable Rate Indebtedness, then such Obligations shall be assumed to bear interest at 80% of the average Revenue Bond Index during the calendar quarter preceding the calendar quarter in which the calculation is made, or if that index is no longer published, another similar index selected by the City, or if the City fails to select a replacement index, an interest rate equal to 80% of the yield for outstanding United States Treasury bonds having an equivalent maturity, or if there are no such Treasury bonds having such maturities, 100% of the lowest prevailing prime rate of any of the five largest commercial banks in the United States ranked by assets; and

(vi) if moneys or Permitted Investments have been deposited by the City into a separate fund or account or are otherwise held by the City or by a fiduciary to be used to pay principal and/or interest on specified Obligations, then the principal and/or interest to be paid from such moneys, Permitted Investments or from the earnings thereon shall be disregarded and not included in calculating Maximum Annual Debt Service.

Maximum Rate

The term "Maximum Rate" means, on any day, the maximum interest rate allowed by law.

Moody's

The term "Moody's" means Moody's Investors Service, Inc., a Delaware corporation, and its successors, and if such corporation shall for any reason no longer perform the functions of a securities rating agency, "Moody's" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City.

Net Proceeds

The term “Net Proceeds” means, when used with respect to any insurance, self-insurance or condemnation award, the proceeds from such award that are remaining after payment of all expenses (including attorneys’ fees) incurred in the collection of such proceeds.

Net System Revenues

The term “Net System Revenues” means, for any Fiscal Year, the System Revenues for such Fiscal Year, less the Maintenance and Operation Costs of the Water System for such Fiscal Year.

Obligations

The term “Obligations” means (a) obligations of the City for money borrowed (such as bonds, notes or other evidences of indebtedness) or as installment purchase payments under any contract (including Installment Payments), or as lease payments under any financing lease (determined to be such in accordance with generally accepted accounting principles), the principal of and interest on which are payable from Net System Revenues; (b) obligations to replenish any debt service reserve funds with respect to such obligations of the City; (c) obligations secured by or payable from any of such obligations of the City; and (d) obligations of the City payable from Net System Revenues under (1) any contract providing for payments based on levels of, or changes in, interest rates, currency exchange rates, stock or other indices, (2) any contract to exchange cash flows or a series of payments, or (3) any contract to hedge payment, currency, rate spread or similar exposure, including but not limited to interest rate cap agreements.

Outstanding

The term “Outstanding,” when used as of any particular time with respect to Obligations, means all Obligations theretofore or thereupon executed, authenticated and delivered by the City or any trustee or other fiduciary, *except* (a) Obligations theretofore cancelled or surrendered for cancellation; (b) Obligations paid or deemed to be paid within the meaning of any defeasance provisions thereof; (c) Obligations owned by the City; and (d) Obligations in lieu of or in substitution for which other Obligations have been executed and delivered.

Owner

The term “Owner” means any person who shall be the registered owner of any certificate or other evidence of a right to receive Installment Payments directly or as security for payment of an Outstanding Obligation.

Parity Installment Obligation

The term “Parity Installment Obligation” means Obligations consisting of or payable from Installment Payments which are not subordinated in right of payment to other Installment Payments.

Parity Obligations

The term “Parity Obligations” means (a) Parity Installment Obligations, (b) Obligations, the principal of and interest on which are payable on a parity with Parity Installment Obligations, and (c) Reserve Fund Obligations.

Payment Fund

The term “Payment Fund” means the fund designated in the Issuing Instrument as the fund into which Installment Payments are to be deposited for the purposes of paying principal of or interest on related Obligations.

Permitted Investments

The term “Permitted Investments” means investments which pursuant to an Issuing Instrument are permissible for the investment of funds received from the sale of Obligations pursuant to the Issuing Document or from other funds held pursuant to the Issuing Instrument.

Project; 1998 Project

The term “Project” means the construction, replacement and improvements to the Water System described in Exhibit A hereto, as it may be modified from time to time in conformance with Section 3.02 hereof. The term “1998 Project” means the Components of the Project initially financed hereunder.

Purchase Price

The term “Purchase Price” means the principal amount, plus interest thereon, owed by the City to the Corporation under the terms hereof for the purchase of Project Components, as provided in Section 4.01 and as specified herein or in a Supplement.

Qualified Take or Pay Obligation

The term “Qualified Take or Pay Obligation” means the obligation of the City to make use of any facility, property or services, or some portion of the capacity thereof, or to pay therefor from System Revenues, or both, whether or not such facilities, properties or services are ever made available to the City for use, and there is provided to the City a certificate of the City or of an Independent Engineer to the effect that the incurrence of such obligation will not adversely affect the ability of the City to comply with the provisions of Section 6.08(a).

Rate Stabilization Fund

The term “Rate Stabilization Fund” means the fund by that name established pursuant to Section 6.08 hereof.

Rating Agencies

The term “Rating Agencies” means Moody’s and S&P, or whichever of them and any other rating agency that is then rating Obligations.

Rebate Fund

The term “Rebate Fund” means the fund by that name established pursuant to any Issuing Instrument.

Rebate Requirement

The term “Rebate Requirement” shall have the meaning specified in any Tax Certificate.

Reserve Fund

The term “Reserve Fund” shall refer to the fund by that name established under in an Issuing Instrument or Supplement.

Reserve Fund Obligations

The term “Reserve Fund Obligations” means the obligations of the City to pay amounts advanced under any Reserve Fund Credit Facility entered into in accordance with the provisions of the related Issuing Instrument or Supplement, which obligations shall constitute Parity Obligations or Subordinated Obligations, as designated by the City.

Reserve Fund Credit Facility

The term “Reserve Fund Credit Facility” shall mean a letter of credit, line of credit, surety bond, insurance policy or similar facility deposited in the Reserve Fund established under an Issuing Instrument in lieu of or in partial substitution for cash or securities on deposit therein.

Reserve Requirement

The term “Reserve Requirement” shall have the meaning given to such term in any Issuing Instrument or Supplement.

Revenue Bond Index

The term “Revenue Bond Index” means the Revenue Bond Index by that name published from time to time in *The Bond Buyer*.

S&P

The term “S&P” means Standard & Poor’s, a division of the McGraw-Hill Companies, a New York corporation, and its successors, and if such corporation shall for any reason no longer perform the functions of a securities rating agency, “S&P” shall be deemed to refer to any other nationally recognized securities rating agency designated by the City.

Secondary Purchase Fund

The term “Secondary Purchase Fund” means the fund by that name established pursuant to Section 6.08 hereof.

Serial Obligations

The term “Serial Obligations” means Obligations for which no sinking fund payments are provided.

Serial Parity Obligations

The term “Serial Parity Obligations” means Serial Obligations which are Parity Installment Payments or are payable on a parity with Parity Installment Obligations.

Series

The term “Series” means Obligations issued at the same time or sharing some other common term or characteristic and designated as a separate Series.

State

The term “State” means the State of California.

Subordinated Credit Provider

The term “Subordinated Credit Provider” means any municipal bond insurance company, bank or other financial institution or organization which is performing in all respects its obligations under any Subordinated Credit Support Instrument for some or all of the Subordinated Obligations.

Subordinated Credit Provider Reimbursement Obligations

The term “Subordinated Credit Provider Reimbursement Obligations” means obligations of the City to repay, from Net System Revenues, amounts advanced by a Subordinated Credit Provider as credit support or liquidity for Subordinated Obligations, which obligations shall constitute Subordinated Obligations.

Subordinated Credit Support Instrument

The term “Subordinated Credit Support Instrument” means a policy of insurance, a letter of credit, a standby purchase agreement, revolving credit agreement or other credit arrangement pursuant to which a Subordinated Credit Provider provides credit support or liquidity with respect to the payment of interest, principal or the purchase price of any Subordinated Obligations.

Subordinated Obligations

The term "Subordinated Obligations" means any Obligations, the payment of which is subordinated in right of payment to Parity Obligations.

Supplement

The term "Supplement" means a supplement to this Installment Purchase Agreement providing for the payment of specific Installment Payments as the Purchase Price for additional Components of the Project, executed and delivered by the City and the Corporation.

System Revenues

The term "System Revenues" means all income, rents, rates, fees, charges and other moneys derived from the ownership or operation of the Water System, including, without limiting the generality of the foregoing:

(a) all income, rents, rates, fees, charges, or other moneys derived by the City from the water services or facilities, and commodities or byproducts, including hydroelectric power, sold, furnished or supplied through the facilities of or in the conduct or operation of the business of the Water System, and including, without limitation, investment earnings on the operating reserves to the extent that the use of such earnings is limited to the Water System by or pursuant to law, and earnings on any Reserve Fund for Obligations, but only to the extent that such earnings may be utilized under the Issuing Instrument for the payment of debt service for such Obligations;

(b) standby charges and Capacity Charges* derived from the services and facilities sold or supplied through the Water System;

(c) the proceeds derived by the City directly or indirectly from the lease of a part of the Water System;

(d) any amount received from the levy or collection of taxes which are solely available and are earmarked for the support of the operation of the Water System;

(e) amounts received under contracts or agreements with governmental or private entities and designated for capital costs for the Water System;* and

(f) grants for maintenance and operations received from the United States of America or from the State of California; provided, however, that System Revenues shall not include: (1) in all cases, customers' deposits or any other deposits or advances subject to refund until such deposits or advances have become the property of the City; and (2) the proceeds of borrowings; but

(g) notwithstanding the foregoing, there shall be deducted from System Revenues any amounts transferred into a Rate Stabilization Fund as contemplated by

* These items of System Revenue may not be used to pay Maintenance and Operation Costs of the Water System.

Section 6.08(b) hereof, and any amounts transferred from current System Revenues to the Secondary Purchase Fund as contemplated by Section 6.08(c) hereof, and there shall be added to System Revenues any amounts transferred out of such Rate Stabilization Fund or the Secondary Purchase Fund to pay Maintenance and Operation Costs of the Water System.

Tax Certificate

The term “Tax Certificate” shall mean any certificate delivered with respect to the maintenance of the tax-exempt status of Tax-Exempt Installment Payment Obligations.

Tax-Exempt Installment Payment Obligations

The term “Tax-Exempt Installment Payment Obligations” means Installment Payment Obligations, the interest component of which is excluded from gross income pursuant to Section 103 of the Code.

Tender Indebtedness

The term “Tender Indebtedness” means any Obligations or portions of Obligations, a feature of which is an option, on the part of the holders thereof, or an obligation, under the terms of such Obligations, to tender all or a portion of such Obligations to the City, a Trustee or other fiduciary or agent for payment or purchase and requiring that such Obligations or portions of Obligations or that such rights to payments or portions of payments be purchased if properly presented. Tender Indebtedness may consist of either Parity Obligations or Subordinated Obligations.

Term Parity Obligations

The term “Term Parity Obligations” means Term Obligations which are Parity Installment Obligations or are payable on a parity with Parity Installment Obligations.

Term Obligations

The term “Term Obligations” means Obligations which are payable on or before their specified maturity dates from sinking fund payments established for that purpose and calculated to retire such Obligations on or before their specified maturity dates.

Trustee

The term “Trustee” means a financial institution acting in its capacity as Trustee under and pursuant to any Issuing Instrument, or its successors and assigns.

Variable Rate Indebtedness

The term “Variable Rate Indebtedness” means any portion of indebtedness evidenced by Obligations, the interest rate for which is subject to adjustment periodically through a remarketing process or according to a stated published index for similar obligations in the

municipal markets. Variable Rate Indebtedness may consist of either Parity Obligations or Subordinated Obligations.

Water Service

The term “Water Service” means the collection, conservation, production, storage, treatment, transmission, furnishing and distribution services made available or provided by the Water System.

Water System

The term “Water System” means any and all facilities, properties, improvements and works at any time owned, controlled or operated by the City as part of the public utility system of the City for water purposes, for the development, obtaining, conservation, production, storage, treatment, transmission, furnishing and distribution of water and its other commodities or byproducts for public and private use (whether located within or without the City), and any related or incidental operations designated by the City as part of the Water System, including reclaimed and re-purified water.

Water Utility Fund

The term “Water Utility Fund” means the fund by that name established under the Charter.

ARTICLE II

REPRESENTATIONS AND WARRANTIES

SECTION 2.01. Representations by the City. The City makes the following representations:

(a) The City is a municipal corporation organized and existing under the Charter, which was duly adopted pursuant to the provisions of the Constitution of the State of California.

(b) The City has full legal right, power and authority to enter into this Installment Purchase Agreement and carry out its obligations hereunder, to carry out and consummate all transactions contemplated by this Installment Purchase Agreement, and the City has complied with the provisions of the Law in all matters relating to such transactions.

(c) By proper action, the City has duly authorized the execution, delivery and due performance of this Installment Purchase Agreement.

(d) The execution and delivery of this Installment Purchase Agreement and the consummation of the transactions herein contemplated will not violate any provision of law, any order of any court or other agency of governments or any indenture, material agreement or other instrument to which the City is now a party or by which it or any of its properties or assets is bound, or be in conflict with, result in a breach of or constitute a default (with due notice or the

passage of time or both) under any such indenture, agreement or other instrument, or result in the creation or imposition of any prohibited lien, charge or encumbrance of any nature whatsoever upon any of the properties or assets of the City.

(e) The City has determined that it is necessary and proper for the City uses and purposes within the terms of the Law that the City acquire the Project in the manner provided for in this Installment Purchase Agreement, in order to provide essential services and facilities to the persons residing in the City.

(f) The City will comply with the provisions of the Tax Certificate so that the interest components of Tax-Exempt Installment Payment Obligations will not be includable in the gross income of the Owners of such Obligations for federal income tax purposes.

SECTION 2.02. Representations and Warranties by the Corporation. The Corporation makes the following representations and warranties:

(a) The Corporation is duly organized and existing under the laws of the State of California.

(b) The Corporation has full legal right, power and authority to enter into this Installment Purchase Agreement and to carry out and consummate all transactions contemplated by this Installment Purchase Agreement.

(c) By proper action, the Corporation has duly authorized the execution, delivery and due performance of this Installment Purchase Agreement.

(d) The execution and delivery of this Installment Purchase Agreement and the consummation of the transactions herein contemplated will not violate any provision of law, any order of any court or other agency of government, or any indenture, material agreement or other instrument to which the Corporation is now a party or by which it or any of its properties or assets is bound, or be in conflict with, result in a breach of or constitute a default (with due notice or the passage of time or both) under any such indenture, agreement or other instrument, or result in the creation or imposition of any prohibited lien, charge or encumbrance of any nature whatsoever upon any of the properties or assets of the Corporation.

ARTICLE III

ACQUISITION AND CONSTRUCTION OF THE PROJECT

SECTION 3.01. Acquisition and Construction of the Project; Components. (a) The Corporation hereby agrees to cause the Project to be constructed, acquired and installed by the City, as agent of the Corporation. The City shall enter into contracts and provide for, as agent of the Corporation, the complete construction, acquisition and installation of the Project. The City hereby agrees that it will cause the construction, acquisition and installation of the Project to be diligently performed.

(b) It is hereby expressly understood and agreed that, except to the extent of proceeds of Obligations which are deposited in an Acquisition Fund, the Corporation shall be

under no liability of any kind or character whatsoever for the payment of any cost of any Components. In the event the proceeds of Obligations deposited in an Acquisition Fund are insufficient to complete the construction, acquisition and installation of the designated Components, the City shall cause to be deposited in such Acquisition Fund (or shall otherwise appropriate and encumber) from and to the extent of available amounts on deposit in the Water Utility Fund (or other lawfully available moneys) an amount equal to that necessary to complete the construction, acquisition and installation of such Components.

(c) The Corporation will not undertake to cause any Component of the Project to be constructed, acquired or installed unless and until the City and the Corporation have entered into a Supplement specifying the Components of the Project to be installed, the date of completion, the purchase price to be paid by the City hereunder for that Component of the Project, and the Installment Payments or the method of calculating Installment Payments.

SECTION 3.02. Changes to the Project. (a) From time to time and at any time, subject to the restrictions set forth in subsection (b) below, the City may modify or amend the description of the Project, to eliminate any part thereof and/or to add or substitute another Component or Components, all without obtaining any consent, by filing an amended Exhibit A with the Corporation and the Trustee under the related Issuing Instrument; provided however, that no such amendment shall add or substitute a Component or Components which are not to be accounted for as an asset of the Water Utility Fund or shall in any way impair the obligations of the City contained in any Supplement executed and delivered prior to any such amendment.

(b) The City may substitute other improvements for those listed as Components in any Supplement, but only if the City first files with the Corporation and the Trustee a certificate of an Authorized City Representative:

(1) identifying the Components to be substituted and the Components they replace;

(2) stating that the substituted Components will be accounted for as an asset of the Water Utility Fund; and

(3) stating that with respect to Components financed with Tax-Exempt Installment Payment Obligations, the estimated costs of construction, acquisition and installation of the substituted improvements are not less than such costs for the improvements previously included in such Supplement, that any excess amounts will be applied to the payment of principal evidenced by the related Obligations or any Additional Obligations, and that said substitution will not violate any provision of the related Tax Certificate.

(c) Substituted Components may include or consist of an undivided interest in such Components, in which event the costs associated with the substituted Components over and above the undivided interest need not be deposited in the Acquisition Fund (or otherwise appropriated and encumbered); provided, however, that the certificate of an Authorized City Representative specifies that the funds necessary to complete the substituted Components are on deposit in the Acquisition Fund or otherwise appropriated and encumbered.

ARTICLE IV

INSTALLMENT PAYMENTS

SECTION 4.01. Purchase Price. (a) The City will pay the Purchase Price for any Components being purchased as provided in a Supplement. The Purchase Price to be paid by the City to the Corporation pursuant to any Supplement hereto, solely from Net System Revenues and from no other sources, is the sum of the principal amount of the City's obligations under such Supplement plus the interest to accrue on the unpaid balance of such principal amount from the effective date thereof over the term thereof, subject to prepayment as provided therein.

(b) The principal amount of the Installment Payments to be made by the City under a Supplement shall be paid at least three Business Days prior to the date such Installment Payments are payable as specified in such Supplement or at such other earlier time or times and in the manner or manners as specified in such Supplement. In the event the principal amount of an Installment Payment is not paid by the date the same is due and payable as specified in such Supplement, the same shall bear interest at the Default Rate, commencing on the day the same as due, to, but not including, the payment date.

(c) The interest to accrue on the unpaid balance of such principal amount shall be paid at least three Business Days prior to the date such interest is payable as specified in a Supplement or at such other earlier time or times as specified in such Supplement, and shall be paid by the City as and constitute interest paid on the principal amount of the City's obligations thereunder. Interest shall be payable in an amount not exceeding the Maximum Rate at the time of incurring such obligation, at such intervals and according to such interest rate formulas as shall be specified in a Supplement or by reference to any Issuing Instrument to which such Supplement relates, and shall be payable with such frequency as shall be specified therein. In the event that interest is not paid by the date such interest is payable, to the extent permitted by applicable law, such interest shall thereafter bear interest at the Default Rate, commencing on the day the same is due, to, but not including, the payment date.

SECTION 4.02. Installment Payments; Reserve Fund Payments. (a) The City shall, subject to any rights of prepayment provided for in a Supplement, pay to the Corporation, solely from Net System Revenues and from no other sources, the Purchase Price in Installment Payments over a period not to exceed the maximum period permitted by law, all as specified in a Supplement.

(b) In the event that a Trustee notifies the City that the amount on deposit in a Reserve Fund or Reserve Account is less than the Reserve Requirement, the City shall deposit or cause to be deposited, solely from Net System Revenues in accordance with Section 5.02(b) hereof, in such Reserve Fund or Reserve Account such amounts on a monthly basis as are necessary to increase the amount on deposit therein to the Reserve Requirement in the ensuing twelve months.

(c) The obligation of the City to make the Installment Payments solely from Net System Revenues is absolute and unconditional, and until such time as the Purchase Price shall have been paid in full (or provision for the payment thereof shall have been made pursuant

to Article IX hereof), the City will not discontinue or suspend any Installment Payments required to be made by it under this section when due, whether or not the Project or any part thereof is operating or operable or has been completed, or its use is suspended, interfered with, reduced or curtailed or terminated in whole or in part, and such Installment Payments shall not be subject to reduction whether by offset or otherwise and shall not be conditioned upon the performance or nonperformance by any party of any agreement for any cause whatsoever.

ARTICLE V

SYSTEM REVENUES

SECTION 5.01. Commitment of the Net System Revenues. (a) All Parity Obligations, including Parity Installment Payment Obligations, shall be secured by a first priority lien on and pledge of Net System Revenues. The City does hereby grant such first priority lien on and pledge of Net System Revenues to secure Parity Obligations. All Parity Obligations shall be of equal rank with each other without preference, priority or distinction of any Parity Obligations over any other Parity Obligations.

(b) All Subordinated Obligations shall be secured by a second priority lien on and pledge of Net System Revenues that is junior and subordinate to the lien on and pledge of Net System Revenues securing Parity Obligations. The City does hereby grant such second priority lien on and pledge of Net System Revenues to secure Subordinated Obligations. All Subordinated Obligations shall be of equal rank with each other without preference, priority or distinction of any Subordinated Obligations over any other Subordinated Obligations.

(c) The City hereby represents and states that it has not granted any lien or charge on any of the Net System Revenues except as provided herein; provided, however, that out of Net System Revenues there may be apportioned such sums for such purposes as are expressly permitted by this Article V.

(d) Nothing contained herein shall limit the ability of the City to grant liens on and pledges of the Net System Revenues that are subordinate to the liens on and pledges of Net System Revenues for the benefit of Parity Obligations and Subordinated Obligations contained herein.

SECTION 5.02. Allocation of System Revenues. (a) In order to carry out and effectuate the commitment and pledge contained in Section 5.01, the City agrees and covenants that all System Revenues shall be received by the City in trust and shall be deposited when and as received in the Water Utility Fund, which fund the City agrees and covenants to maintain so long as any Installment Payment Obligations remain unpaid, and all moneys in the Water Utility Fund shall be so held in trust and applied and used solely as provided herein. The City shall pay from the Water Utility Fund: (1) directly or as otherwise required all Maintenance and Operation Costs of the Water System; and (2) to the Trustee, for deposit in the Payment Fund for Parity Obligations, including Reserve Fund Obligations that are Parity Obligations, the amounts specified in any Issuing Instrument, as payments due on account of Parity Obligations (including any Credit Provider Reimbursement Obligations that are Parity Obligations). In the event there are insufficient Net System Revenues to make all of the payments contemplated by clause (2) of

the immediately preceding sentence, then said payments should be made as nearly as practicable, *pro rata*, based upon the respective unpaid principal amounts of said Parity Obligations.

(b) After the payments contemplated by subsection (a) above have been made, and in any event not less frequently than January 15 and July 15 of each year, any remaining Net System Revenues shall be used to make up any deficiency in the Reserve Funds for Parity Obligations. Notwithstanding the use of a Reserve Fund Credit Facility in lieu of depositing funds in the related Reserve Fund for Parity Obligations, in the event of any draw on the related Reserve Fund Credit Facility, there shall be deemed a deficiency in such Reserve Fund for Parity Obligations until the amount of the Reserve Fund Credit Facility is restored to its pre-draw amount. In the event there are insufficient Net System Revenues to make up all deficiencies in all Reserve Funds for Parity Obligations, such payments into the Reserve Funds shall be made as nearly as practicable *pro rata* based on the respective unpaid principal amount of all Parity Obligations. Any amounts thereafter remaining in the Water Utility Fund may from time to time be used to pay the amounts specified in any Issuing Instrument as payments due on account of Subordinated Obligations (including any Reserve Fund Obligations for Subordinated Obligations, any Credit Provider Reimbursement Obligations that are Subordinated Obligations and any Subordinated Credit Provider Reimbursement Obligations), provided the following conditions are met:

(1) all Maintenance and Operation Costs of the Water System are being and have been paid and are then current; and

(2) all deposits and payments contemplated by clause (2) of subsection (a) above shall have been made in full and no deficiency in any Reserve Fund for Parity Obligations shall exist, and there shall have been paid, or segregated within the Water Utility Fund, the amounts payable during the current month pursuant to clause (2) of subsection (a) above.

After deposits contemplated by this Section have been made, any amounts thereafter remaining in the Water Utility Fund may be used for any lawful purpose of the Water System.

SECTION 5.03. Additional Obligations. (a) The City may not create any Obligations, the payments of which are senior or prior in right to the payment by the City of Parity Obligations.

(b) Without regard to subsection (c) below, the City may at any time enter into or create an obligation or commitment which is a Reserve Fund Obligation, provided that the Obligation to which the Reserve Fund Obligation relates is permitted to be entered into under the terms of this Section.

(c) After the initial issuance of Parity Obligations hereunder, the City may at any time and from time to time issue or create any other Parity Obligations, provided that:

(1) there shall not have occurred and be continuing an Event of Default under the terms of this Installment Purchase Agreement, any Issuing Instrument or any Credit Support Instrument; and

(2) the City obtains or provides a certificate or certificates, prepared by the City or at the City's option by a Consultant, showing that:

(A) the Net System Revenues as shown by the books of the City for any 12-consecutive-month period within the 18 consecutive months ending immediately prior to the incurring of such additional Parity Obligations shall have amounted to or exceeded the greater of (i) at least 1.20 times the Maximum Annual Debt Service on all Parity Obligations to be Outstanding immediately after the issuance of the proposed Parity Obligations or (ii) at least 1.00 times the Maximum Annual Debt Service on all Obligations to be Outstanding immediately after the issuance of the proposed Parity Obligations. For purposes of preparing the certificate or certificates described above, the City or its Consultant may rely upon audited financial statements, or, if audited financial statements for the period are not available, financial statements prepared by the City that have not been subject to audit by an Independent Certified Public Accountant; or

(B) the estimated Net System Revenues for the five Fiscal Years following the earlier of (i) the end of the period during which interest on those Parity Obligations is to be capitalized or, if no interest is to be capitalized, the Fiscal Year in which the Parity Obligations are issued, or (ii) the date on which substantially all new Components to be financed with such Parity Obligations are expected to commence operations, will be at least equal to 1.20 times the Maximum Annual Debt Service for all Parity Obligations which will be Outstanding immediately after the issuance of the proposed Parity Obligations.

(d) For purposes of the computations to be made as described in subsection (c)(2)(B) above, the determination of Net System Revenues:

(1) may take into account any increases in rates and charges which relate to the Water System and which have been approved by the City Council, and shall take into account any reduction in such rates and charges which have been approved by the City Council, which will, for purposes of the test described in subsection (c)(2)(B) above, be effective during a Fiscal Year ending within the five-Fiscal Year period for which such estimate is being made; and

(2) may take into account an allowance for any estimated increase in such Net System Revenues from any revenue-producing additions or improvements to or extensions of the Water System to be made with the proceeds of such additional indebtedness or with the proceeds of Parity Obligations previously issued, all in an amount equal to the estimated additional average annual Net System Revenues to be derived from such additions, improvements and extensions during the five-Fiscal Year period contemplated by subsection (c)(2)(B) above, all as shown by such certificate of the City or its Consultant, as applicable; and

(3) for the period contemplated by subsection (c)(2)(B), Maintenance and Operation Costs of the Water System shall initially be deemed to be equal to such

costs for the 12 consecutive months immediately prior to incurring such other Parity Obligations for the first Fiscal Year of the five-Fiscal Year period, but adjusted if deemed necessary by the City or its Consultant, as applicable, for any increased Maintenance and Operations Costs of the Water System which are, in the judgment of the City or such Consultant, as applicable, essential to maintaining and operating the Water System and which will occur during any Fiscal Year ending within the period contemplated by subsection (c)(2)(B) above.

(e) The certificate or certificates described above in subsection (c)(2)(B) shall not be required if the Parity Obligations being issued are for the purpose of (1) issuing the Parity Obligations initially issued under this Installment Purchase Agreement or (2) refunding (A) any then Outstanding Parity Obligations if at the time of the issuance of such Parity Obligations a certificate of an Authorized City Representative shall be delivered showing that the sum of Adjusted Debt Service on all Parity Obligations Outstanding for all remaining Fiscal Years after the issuance of the refunding Parity Obligations will not exceed the sum of Adjusted Debt Service on all Parity Obligations Outstanding for all remaining Fiscal Years prior to the issuance of such refunding Parity Obligations; or (B) then Outstanding Balloon Indebtedness, Tender Indebtedness or Variable Rate Indebtedness, but only to the extent that the principal amount of such indebtedness has been put, tendered to or otherwise purchased pursuant to a standby purchase or other liquidity facility relating to such indebtedness.

(f) Without regard to subsection (c) above, if (i) no Event of Default has occurred and is continuing and (ii) no event of default or termination event attributable to an act of or failure to act by the City under any Credit Support Instrument has occurred and is continuing, the City may issue or incur Subordinated Obligations, and such Subordinated Obligations shall be paid in accordance with the provisions of Section 5.02(b) hereof, provided that:

(1) City obtains or provides a certificate or certificates, prepared by the City or at the City's option by a Consultant, showing that:

(A) the Net System Revenues as shown by the books of the City for any 12-consecutive-month period within the 18 consecutive months ending immediately prior to the incurring of such additional Subordinated Obligations shall have amounted to at least 1.00 times the Maximum Annual Debt Service on all Obligations to be Outstanding immediately after the issuance of the proposed Subordinated Obligations; or

(B) the estimated Net System Revenues for the five Fiscal Years following the earlier of (i) the end of the period during which interest on those Subordinated Obligations is to be capitalized or, if no interest is to be capitalized, the Fiscal Year in which the Subordinated Obligations are issued; or (ii) the date on which substantially all new facilities financed with such Subordinated Obligations are expected to commence operations, will be at least equal to 1.00 times the Maximum Annual Debt Service on all Obligations to be Outstanding immediately after the issuance of the proposed Subordinated Obligations.

(2) For purposes of preparing the certificate or certificates described in clause (A) of subsection (f)(1) above, the City and its Consultant(s) may rely upon audited financial statements or, if audited financial statements for the period are not available, financial statements prepared by the City that have not been subject to audit by an Independent Certified Public Accountant.

(3) For purposes of the computations to be made as described in clause (B) of subsection (f)(1) above, the determination of Net System Revenues:

(A) may take into account any increases in rates and charges which relate to the Water System and which have been approved by the City Council and shall take into account any reduction in such rates and charges which have been approved by the City Council, which will, for purposes of the test described in clause (B) of subsection (f)(1) above, be effective during any Fiscal Year ending within the five-Fiscal Year period for which such estimate is made; and

(B) may take into account an allowance for any estimated increase in such Net System Revenues from any revenue-producing additions or improvements to or extensions of the Water System to be made with the proceeds of such additional indebtedness, with the proceeds of Obligations previously issued or with cash contributions made or to be made by the City, all in an amount equal to the estimated additional average annual Net System Revenues to be derived from such additions, improvements and extensions during the five-Fiscal Year period contemplated by clause (B) of subsection (f)(1) above, all as shown by such certificate of the City or its Consultant, as applicable; and

(C) for the period contemplated by clause (B) of subsection (f)(1) above, shall initially include Maintenance and Operation Costs of the Water System in an amount equal to such costs for any 12-consecutive month period within the 24 consecutive months ending immediately prior to incurring such Subordinated Obligations for the first Fiscal Year of the five-Fiscal Year period, but adjusted if deemed necessary by the City or its Consultant, as applicable, for any increased Maintenance and Operations Costs of the Water System which are, in the judgment of the City or its Consultant, as applicable, essential to maintaining and operating the Water System and which will occur during any Fiscal Year ending within the period contemplated by clause (B) of subsection (f)(1) above.

(4) The certificate or certificates described above in subsection (f)(1) above shall not be required if the Subordinated Obligations being issued are for the purpose of refunding (i) then-Outstanding Parity Obligations or Subordinated Obligations if at the time of the issuance of such Subordinated Obligations a certificate of an Authorized City Representative shall be delivered showing that the sum of Debt Service for all remaining Fiscal Years on all Parity Obligations and Subordinated Obligations Outstanding after the issuance of the refunding Subordinated Obligations will not exceed the sum of Debt Service for all remaining Fiscal Years on all Parity Obligations and

Subordinated Obligations Outstanding prior to the issuance of such refunding Subordinated Obligations; or (ii) then-Outstanding Balloon Indebtedness, Tender Indebtedness or Variable Rate Indebtedness, but only to the extent that the principal amount of such indebtedness has been put, tendered to or otherwise purchased by a standby purchase agreement or other liquidity facility relating to such indebtedness.

ARTICLE VI

COVENANTS OF THE CITY

SECTION 6.01. Compliance With Installment Purchase Agreement and Ancillary Agreements. (a) The City will punctually pay Parity Obligations in strict conformity with the terms hereof and thereof; and will faithfully observe and perform all the agreements, conditions, covenants and terms contained herein required to be observed and performed by it, and will not terminate this Installment Purchase Agreement for any cause including, without limiting the generality of the foregoing, any acts or circumstances that may constitute failure of consideration, destruction of or damage to the Project, commercial frustration of purpose, any change in the tax or other laws of the United States of America or of the State of California or any political subdivision of either or any failure of the Corporation to observe or perform any agreement, condition, covenant or term contained herein required to be observed and performed by it, whether express or implied, or any duty, liability or obligation arising out of or connected herewith or the insolvency, or deemed insolvency, or bankruptcy or liquidation of the Corporation or any force majeure, including acts of God, tempest, storm, earthquake, war, rebellion, riot, civil disorder, acts of public enemies, blockade or embargo, strikes, industrial disputes, lock outs, lack of transportation facilities, fire, explosion, or acts or regulations of governmental authorities.

(b) The City will faithfully observe and perform all the agreements, conditions, covenants and terms contained in this Installment Purchase Agreement, including Supplements, and any Issuing Instrument or Credit Support Instrument relating to Parity Obligations required to be observed and performed by it, and it is expressly understood and agreed by and between the parties to this Installment Purchase Agreement that, subject to Section 10.07 hereof, each of the agreements, conditions, covenants and terms contained herein and therein is an essential and material term of the purchase of and payment for each Component by the City pursuant to, and in accordance with, and as authorized under the Law.

(c) The City will faithfully observe and perform all of the agreements and covenants of the City contained in each Authorizing Ordinance and will not permit the same to be amended or modified so as to adversely affect the Owners of Installment Payment Obligations.

(d) The City shall be unconditionally and irrevocably obligated, so long as any Installment Payment Obligations remain Outstanding and unpaid, to take all lawful action necessary or required to continue to entitle the City to collect and deposit such System Revenues in the Water Utility Fund for use as provided in this Installment Purchase Agreement; provided, however, that such obligation does not, in any way, limit the City's ability to undertake any and

all legal actions, including any appeals, in the defense of a federal court order dictating a water system configuration other than that approved and adopted by the City.

SECTION 6.02. Against Encumbrances. The City will not make any pledge of or place any lien on the Net System Revenues except as otherwise provided or permitted herein.

SECTION 6.03. Debt Service Reserve Fund. The City will maintain or cause to be maintained each Reserve Fund at the applicable Reserve Requirement. In the event the amount in any such fund or account falls below the applicable Reserve Requirement, the City will replenish such fund or account up to the applicable Reserve Requirement pursuant to Section 5.02 hereof.

SECTION 6.04. Against Sale or Other Disposition of Property. (a) The City will not sell, lease or otherwise dispose of the Water System or any part thereof essential to the proper operation of the Water System or to the maintenance of the System Revenues, except as provided in Sections 6.04(b) and Section 6.19 hereof. Further, the City will not, except as otherwise provided herein, enter into any agreement or lease which impairs the operation of the Water System or any part thereof necessary to secure adequate Net System Revenues for the payment of the Parity Obligations or which would otherwise impair the rights of the Corporation with respect to the System Revenues or the operation of the Water System.

(b) The City may dispose of any of the works, plant properties, facilities or other parts of the Water System, or any real or personal property comprising a part of the Water System, only upon the approval of the City Council and consistent with one or more of the following:

(1) the City in its discretion may carry out such a disposition if the facilities or property being disposed of are not material to the operation of the Water System, or shall have become unserviceable, inadequate, obsolete or unfit to be used in the operation of the Water System or are no longer necessary, material or useful to the operation of the Water System, and if such disposition will not materially reduce the Net System Revenues and if the proceeds of such disposition are deposited in the Water Utility Fund;

(2) the City in its discretion may carry out such a disposition if the City receives from the acquiring party an amount equal to the fair market value of the portion of the Water System disposed of. As used in this clause (2), "fair market value" means the most probable price that the portion being disposed of should bring in a competitive and open market under all conditions requisite to a fair sale, the willing buyer and willing seller each acting prudently and knowledgeably, and assuming that the price is not affected by coercion or undue stimulus. The proceeds of the disposition shall be used (A) first, promptly to redeem, or irrevocably set aside for the redemption of, Parity Obligations, and second, promptly to redeem, or irrevocably set aside for the redemption of, Subordinated Obligations, and/or (B) to provide for a part of the cost of additions to and betterments and extensions of the Water System; provided, however, that before any such disposition under this clause (2), the City must obtain (i) a certificate of an Independent Engineer to the effect that upon such disposition and the use of the

proceeds of the disposition as proposed by the City, the remaining portion of the Water System will retain its operational integrity and the estimated Net System Revenues for the five Fiscal Years following the Fiscal Year in which the disposition is to occur will be equal to or exceed the greater of (i) at least 1.20 times the Adjusted Debt Service on all Outstanding Parity Obligations during the five Fiscal Years following the Fiscal Year in which the disposition is to occur, or (ii) at least 1.00 times the Adjusted Debt Service on all Outstanding Obligations during the first five Fiscal Years following the Fiscal Year in which the disposition is to occur, taking into account (aa) the reduction in revenue resulting from the disposition, (bb) the use of any proceeds of the disposition for the redemption of Parity Obligations and/or Subordinated Obligations, (cc) the Independent Engineer's estimate of revenue from customers anticipated to be served by any additions to and betterments and extensions of the Water System financed in part by the proceeds of the disposition, and (dd) any other adjustment permitted in the preparation of a certificate under Section 5.03(c)(2)(B) of this Installment Purchase Agreement, and (ii) confirmation from the Rating Agencies to the effect that the rating then in effect on any Outstanding Parity Obligations will not be reduced or withdrawn upon such disposition.

(c) The City will operate the Water System in an efficient and economic manner, *provided* that the City may remove from service on a temporary or permanent basis such part or parts of the Water System as the City shall determine, so long as (1) Net System Revenues are at least equal to the greater of (i) 100% of all Obligations payable in the then-current Fiscal Year or (ii) 120% of Adjusted Debt Service for the then-current Fiscal Year, after giving effect to any defeasance of Parity Obligations and/or Subordinated Obligations occurring incident to such removal, and for each Fiscal Year thereafter to and including the Fiscal Year during which the last Installment Payment is due, after giving effect to such defeasance, as evidenced by (i) an Engineer's Report on file with the City, or (ii) a Certificate of the City, (2) the value of the parts of the Water System to be so removed is less than 5% of the total Water System Plant assets, each as shown on the most recent audited financial statements that include the Water Utility Fund, and (3) the City shall have filed with each Trustee an opinion of Bond Counsel to the effect that the removal of such part or parts of the Water System will not adversely affect the exclusion from gross income for federal income tax purposes of the interest on Tax-Exempt Installment Payment Obligations.

SECTION 6.05. Covenant Regarding State Orders. The City covenants and agrees that it shall comply in all material respects with the provisions of the existing compliance orders of the State of California Department of Public Health applicable to the Water System initially issued in January 1997 and most recently amended on May 11, 2007, through and including Amendment 11.

SECTION 6.06. Prompt Acquisition and Construction. The City shall take all necessary and appropriate steps to construct, acquire and install the Project, as agent of the Corporation, with all practicable dispatch and in an expeditious manner and in conformity with law so as to complete the same as soon as possible.

SECTION 6.07. Maintenance and Operation of the Water System; Budgets. The City shall maintain and preserve the Water System in good repair and working order at all times

and shall operate the Water System in an efficient and economical manner and will pay all Maintenance and Operation Costs of the Water System as they become due and payable. The City shall adopt and make available to the Corporation, on or before the effective date hereof, a budget approved by the City Council of the City setting forth the estimated Maintenance and Operation Costs of the Water System for the period from such date until the close of the then-current Fiscal Year. On or before August 1 of each Fiscal Year, the City shall adopt, and on or before the day that is 120 days after the beginning of the Fiscal Year, make available to the Corporation a budget approved by the City Council of the City setting forth the estimated Maintenance and Operation Costs of the Water System for such Fiscal Year. Any budget may be amended at any time during any Fiscal Year and such amended budget shall be filed by the City with the Corporation.

SECTION 6.08. Amount of Rates and Charges; Rate Stabilization Fund; Other Funds.

(a) The City shall fix, prescribe and collect rates and charges for the Water Service which will be at least sufficient to yield the greater of (1) Net System Revenues sufficient to pay during each Fiscal Year all Obligations payable in such Fiscal Year or (2) Adjusted Net System Revenues during each Fiscal Year equal to 120% of the Adjusted Debt Service for such Fiscal Year. The City may make adjustments from time to time in such rates and charges and may make such classification thereof as it deems necessary, but shall not reduce the rates and charges then in effect unless the Net System Revenues from such reduced rates and charges will at all times be sufficient to meet the requirements of this subsection.

(b) The City may establish, as a fund within the Water Utility Fund, a fund denominated the "Rate Stabilization Fund." From time to time, the City may deposit into the Rate Stabilization Fund, from current System Revenues, such amounts as the City shall determine and the amount of available current System Revenues shall be reduced by the amount so transferred. Amounts may be transferred from the Rate Stabilization Fund solely and exclusively to pay Maintenance and Operation Costs of the Water System, and any amounts so transferred shall be deemed System Revenues when so transferred. All interest or other earnings upon amounts in the Rate Stabilization Fund may be withdrawn therefrom and accounted for as System Revenues.

(c) The City may establish, as a fund within the Water Utility Fund, a fund denominated the "Secondary Purchase Fund." From time to time, the City may deposit in the Secondary Purchase Fund, from any lawful source, which may or may not consist of current System Revenues, such amounts as the City shall determine, and the amount of available System Revenues shall be reduced by the amount so transferred, but only to the extent that amounts so transferred consist of then-current System Revenues. Amounts may be transferred from the Secondary Purchase Fund solely and exclusively to pay Maintenance and Operation Costs of the Water System, and any amounts so transferred shall be deemed System Revenues when so transferred. All interest or other earnings upon amounts in the Secondary Purchase Fund may be withdrawn therefrom and accounted for as System Revenues.

SECTION 6.09. Payment of Claims. The City will pay and discharge any and all lawful claims for labor, materials or supplies which, if unpaid, might become a lien on the

System Revenues or any part thereof or on any funds in the hands of the City or the Trustee might impair the security of the Installment Payments, but the City shall not be required to pay such claims if the validity thereof shall be contested in good faith.

SECTION 6.10. Compliance with Contracts. The City will comply with, keep, observe and perform all agreements, conditions, covenants and terms, express or implied, required to be performed by it contained in all contracts for the use of the Water System and all other contracts affecting or involving the Water System to the extent that the City is a party thereto.

SECTION 6.11. Insurance. (a) The City will procure and maintain or cause to be procured and maintained insurance on the Water System with responsible insurers, in such amounts and against such risks (including accident to or destruction of the Water System) as are usually covered in connection with water systems similar to the Water System, or it will self-insure or participate in an insurance pool or pools with reserves adequate, in the reasonable judgment of the City, to protect the Water System against loss. In the event of any damage to or destruction of the Water System caused by the perils covered by such insurance or self insurance, the Net Proceeds thereof shall be applied to the reconstruction, repair or replacement of the damaged or destroyed portion of the Water System. The City shall begin such reconstruction, repair or replacement promptly after such damage or destruction shall occur, and shall continue and properly complete such reconstruction, repair or replacement as expeditiously as possible, and shall pay out of such Net Proceeds all costs and expenses in connection with such reconstruction, repair or replacement so that the same shall be completed and the Water System shall be free and clear of all claims and liens unless the City determines that such property or facility is not necessary to the efficient or proper operation of the Water System and therefore determines not to reconstruct, repair or replace such project or facility. If such Net Proceeds exceed the costs of such reconstruction, repair or replacement, then the excess Net Proceeds shall be deposited in the Water Utility Fund and be available for other proper uses of funds deposited in the Water Utility Fund.

(b) The City will procure and maintain such other insurance which it shall deem advisable or necessary to protect its interests and the interests of the Corporation, which insurance shall afford protection in such amounts and against such risks as are usually covered in connection with water systems similar to the Water System; provided that any such insurance may be maintained under a self-insurance program so long as such self-insurance is maintained in the amounts and in the manner usually maintained in connection with water systems similar to the Water System.

(c) All policies of insurance required to be maintained herein shall, to extent reasonably obtainable, provide that the Corporation and each Trustee shall be given 30 days' written notice of any intended cancellation thereof or reduction of coverage provided thereby. The City shall certify to the Corporation and each Trustee annually on or before August 31 that it is in compliance with the insurance requirements hereunder.

SECTION 6.12. Accounting Records; Financial Statements and Other Reports. (a) The City will keep appropriate accounting records in which complete and correct entries shall be made of all transactions relating to the Water System, which records shall be available for

inspection by the Corporation and the Trustee at reasonable hours and under reasonable conditions.

(b) The City will prepare and file with the Corporation annually (commencing with the Fiscal Year ending June 30, 1998), within 270 days of the close of each Fiscal Year, financial statements that include the Water Utility Fund for the preceding Fiscal Year prepared in accordance with generally accepted accounting principles, together with an Accountant's Report thereon.

(c) The City will furnish a copy of the financial statements referred to in subsection (b) above to any Owner of the Certificates requesting a copy thereof, which may be in electronic form.

SECTION 6.13. Protection of Security and Rights of the Corporation. The City will preserve and protect the security hereof and the rights of the Corporation to the Installment Payments hereunder and will warrant and defend such rights against all claims and demands of all persons.

SECTION 6.14. Payment of Taxes and Compliance with Governmental Regulations. The City shall pay and discharge all taxes, assessments and other governmental charges which may hereafter be lawfully imposed upon the Water System or any part thereof or upon the System Revenues when the same shall become due, except that the City may contest in good faith any taxes, assessments and other governmental charges so long as the City shall have budgeted for the amount being contested and, if appropriate, such amount shall have been included as Maintenance and Operation Costs of the Water System. The City shall duly observe and conform with all valid regulations and requirements of any governmental authority relative to the operation of the Water System or any part thereof, but the City shall not be required to comply with any regulations or requirements so long as the validity or application thereof shall be contested by the City in good faith.

SECTION 6.15. Collection of Rates and Charges; No Free Service. The City shall have in effect at all times rules and regulations for the payment of bills for Water Service. Such regulations may provide that where the City furnishes water to the property receiving Water Service, the Water Service charges shall be collected together with the water rates upon the same bill providing for a due date and a delinquency date for each bill. In each case where such bill remains unpaid in whole or in part after it becomes delinquent, the City may disconnect such premises from the Water System, and such premises shall not thereafter be reconnected to the Water System except in accordance with City operating rules and regulations governing such situations of delinquency. To the extent permitted by law, the City shall not permit any part of the Water System or any facility thereof to be used or taken advantage of free of charge by any authority, firm or person, or by any public agency (including the United States of America, the State of California and any city, county, district, political subdivision, public authority or agency thereof).

SECTION 6.16. Eminent Domain Proceeds. If all or any part of the Water System shall be taken by eminent domain proceedings, then subject to the provisions of any Authorizing Ordinance, the Net Proceeds thereof shall be applied to the replacement of the property or

facilities so taken, unless the City determines that such property or facility is not necessary to the efficient or proper operation of the Water System and therefore determines not to replace such property or facilities. Any Net Proceeds of such award not applied to replacement or remaining after such work has been completed shall be deposited in the Water Utility Fund and be available for other proper uses of funds deposited in the Water Utility Fund.

SECTION 6.17. Tax Covenants. There shall be included in each Supplement relating to Tax-Exempt Installment Payment Obligations such covenants as are deemed necessary or appropriate by Bond Counsel for the purpose of assuring that interest on such Installment Payment Obligations shall be excluded from gross income under section 103 of the Code.

SECTION 6.18. Further Assurances. The City shall adopt, deliver, execute and make any and all further assurances, instruments and resolutions as may be reasonably necessary or proper to carry out the intention or to facilitate the performance hereof and for the better assuring and confirming unto the Corporation of the rights and benefits provided to it herein.

SECTION 6.19. Subcontracting. Nothing herein to the contrary shall prevent the City from delegating the power to be an operator of some or all of the Water System, even though the City continues to retain ownership of the Water System and its operations, and no such subcontracting arrangement shall relieve the City of any of its obligations hereunder. Prior to the effective date of any such delegation, the City shall deliver to the Trustee an opinion of Bond Counsel to the effect that the proposed delegation will not have an adverse effect on the exclusion from gross income for federal income tax purposes of the interest component of Tax-Exempt Installment Payment Obligations.

SECTION 6.20. Additional Covenants. The City may provide additional covenants pursuant to any Supplement, including covenants relating to any Credit Support obtained for Installment Payment Obligations; provided, however, that such additional covenants do not materially and adversely affect the right of Owners of Outstanding Obligations issued prior to the effective date of any such Supplement.

ARTICLE VII

PREPAYMENT OF INSTALLMENT PAYMENTS

SECTION 7.01. Prepayment of Installment Payments. Provisions may be made in any Supplement for the prepayment of Installment Payments, in whole or in part, in such multiples and in such order of maturity and from funds of any source, and with such prepayment premiums and other terms as are specified in the Supplement. Said Supplement shall also provide for any notices to be given relating to such prepayment.

ARTICLE VIII
EVENTS OF DEFAULT AND REMEDIES OF THE CORPORATION

SECTION 8.01. Events of Default and Acceleration of Maturities. If one or more of the following Events of Default shall happen, that is to say:

(a) if default shall be made in the due and punctual payment of or on account of any Parity Obligation as the same shall become due and payable;

(b) if default shall be made by the City in the performance of any of the agreements or covenants required herein to be performed by it (other than as specified in subsection (a) above), and such default shall have continued for a period of 60 days after the City shall have been given notice in writing of such default by the Corporation or any Trustee;

(c) if any Event of Default specified in any Supplement, Authorizing Ordinance or Issuing Instrument shall have occurred and be continuing; or

(d) if the City shall file a petition or answer seeking arrangement or reorganization under the federal bankruptcy laws or any other applicable law of the United States of America or any state therein, or if a court of competent jurisdiction shall approve a petition filed with the consent of the City seeking arrangement or reorganization under the federal bankruptcy laws or any other applicable law of the United States of America or any state therein, or if under the provisions of any other law for the relief or aid of debtors any court of competent jurisdiction shall assume custody or control of the City or of the whole or any substantial part of its property;

then, and in each and every such case during the continuance of such Event of Default, the Corporation shall upon the written request of the Owners of 25% or more of the aggregate principal amount of all Series of Parity Installment Obligations Outstanding, voting collectively as a single class, by notice in writing to the City, declare the entire unpaid principal amount thereof and the accrued interest thereon to be due and payable immediately, and upon any such declaration the same shall become immediately due and payable, anything contained herein to the contrary notwithstanding; provided, that with respect to a Series of Parity Installment Obligations which is credit enhanced by a Credit Support Instrument, acceleration shall not be effective unless the declaration is consented to by the related Credit Provider. The foregoing provisions, however, are subject to the condition that if at any time after the entire principal amount of all Parity Installment Obligations and the accrued interest thereon shall have been so declared due and payable and before any judgment or decree for the payment of the moneys due shall have been obtained or entered, the City shall deposit with the Corporation a sum sufficient to pay the unpaid principal amount of all such Parity Installment Obligations and the unpaid payments of any other Parity Obligations referred to in clause (a) above due prior to such declaration and the accrued interest thereon, with interest on such overdue installments at the rate or rates applicable thereto in accordance with their terms, and the reasonable expenses of the Corporation, and any and all other defaults known to the Corporation (other than in the payment of the entire principal amount of the unpaid Parity Installment Obligations and the accrued interest thereon due and payable solely by reason of such declaration) shall have been made good or cured to the satisfaction of the Corporation or provision deemed by the Corporation to be

adequate shall have been made therefor, then and in every such case the Corporation, by written notice to the City, may rescind and annul such declaration and its consequences; but no such rescission and annulment shall extend to or shall affect any subsequent default or shall impair or exhaust any right or power consequent thereon.

Subject to this Section, the Owners of Subordinated Obligations may enforce the provisions of this Installment Purchase Agreement for their benefit by appropriate legal proceedings. The payment of Subordinated Obligations will be subordinated in right of payment to payment of the Parity Obligations (except for any payment in respect of Subordinated Obligations from the Reserve Fund securing such Subordinated Obligations). Upon the occurrence and during the continuance of any Event of Default, Owners of Parity Obligations will be entitled to receive payment thereof in full before the Owners of Subordinated Obligations are entitled to receive payment thereof (except for any payment in respect of Subordinated Obligations from the Reserve Fund securing such Subordinated Obligations) and the Owners of the Subordinated Obligations will become subrogated to the rights of the Owners of Parity Obligations to receive payments with respect thereto.

SECTION 8.02. Application of Net System Revenues Upon Acceleration. All Net System Revenues received after the date of the declaration of acceleration by the Corporation as provided in Section 8.01 hereof shall be applied in the following order:

(a) First, to the payment of the costs and expenses of the Corporation and the Trustee, if any, in carrying out the provisions of this Article VIII, including reasonable compensation to its accountants and counsel;

(b) Second, to the payment of the entire principal amount of the unpaid Parity Installment Obligations and the unpaid principal amount of all other Parity Obligations and the accrued interest thereon, with interest on the overdue installments at the rate or rates of interest applicable thereto in accordance with their respective terms. In the event there are insufficient Net System Revenues to pay the entire principal amount of and accrued interest on all Parity Obligations, then accrued interest shall first be paid and any remaining amount shall be paid on account of principal, and in the event there are insufficient Net System Revenues to fully pay either interest or principal in accordance with the foregoing, then payment shall be prorated within a priority based upon the total amounts due in that priority; and

(c) Third, to the payment of the entire principal amount of the unpaid Subordinated Obligations and the accrued interest thereon, with interest on the overdue installments at the rate or rates of interest applicable thereto in accordance with their respective terms. In the event there are insufficient Net System Revenues to pay the entire principal amount of and accrued interest on all Subordinated Obligations, then accrued interest shall first be paid and any remaining amount shall be paid on account of principal, and in the event there are insufficient Net System Revenues to fully pay either interest or principal in accordance with the foregoing, then payment shall be prorated within a priority based upon the total amounts due in that priority.

SECTION 8.03. Other Remedies of the Corporation. The Corporation shall have the right:

(a) by mandamus or other action or proceeding or suit at law or in equity to enforce its rights against the City or any councilmember, officer or employee thereof, and to compel the City or any such councilmember, officer or employee to perform and carry out its or his duties under the Law and the agreements and covenants required to be performed by it or him contained herein;

(b) by suit in equity to enjoin any acts or things which are unlawful or violate the rights of the Corporation; or

(c) by suit in equity upon the happening of an Event of Default to require the City and its councilmembers, officers and employees to account as the trustee of an express trust.

SECTION 8.04. Non-Waiver. (a) Nothing in this Article VIII or in any other provision hereof shall affect or impair the obligation of the City, which is absolute and unconditional, to pay the Installment Payments to the Corporation at the respective due dates or upon prepayment from the Net System Revenues and the other funds herein committed for such payment, or shall affect or impair the right of the Corporation, which is also absolute and unconditional, to institute suit to enforce such payment by virtue of the contract embodied herein.

(b) A waiver of any default or breach of duty or contract by the Corporation shall not affect any subsequent default or breach of duty or contract or impair any rights or remedies on any such subsequent default or breach of duty or contract. No delay or omission by the Corporation to exercise any right or remedy accruing upon any default or breach of duty or contract shall impair any such right or remedy or shall be construed to be a waiver of any such default or breach of duty or contract or an acquiescence therein, and every right or remedy conferred upon the Corporation by the Law or by this Article VIII may be enforced and exercised from time to time and as often as shall be deemed expedient by the Corporation.

(c) If any action, proceeding or suit to enforce any right or exercise any remedy is abandoned or determined adversely to the Corporation, the City and the Corporation shall be restored to their former positions, rights and remedies as if such action, proceeding or suit had not been brought or taken.

SECTION 8.05. Remedies Not Exclusive. No remedy herein conferred upon or reserved to the Corporation is intended to be exclusive of any other remedy, and each such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing in law or in equity or by statute or otherwise and may be exercised without exhausting and without regard to any other remedy conferred by law.

ARTICLE IX

DISCHARGE OF INSTALLMENT PAYMENT OBLIGATIONS

SECTION 9.01. Discharge of Installment Payment Obligations. If the City shall pay or cause to be paid or there shall otherwise be paid to the Owners all Outstanding Installment Payment Obligations of a Series, the principal thereof and the interest and redemption premiums, if any, thereon or if all such Outstanding Installment Payment Obligations shall be deemed to have been paid at the times and in the manner stipulated in the applicable Issuing Instrument, then, as to any such Series, all agreements, covenants and other obligations of the City hereunder shall thereupon cease, terminate and become void and be discharged and satisfied, except for the obligation of the City to pay or cause to be paid all sums due hereunder.

ARTICLE X

MISCELLANEOUS

SECTION 10.01. Liability of City Limited to System Revenues.

(a) Notwithstanding anything contained herein, the City shall not be required to advance any moneys derived from any source of income other than the Net System Revenues and the other funds provided herein for the payment of the Installment Payments or for the performance of any other agreements or covenants required to be performed by it contained herein. The City may, however, but in no event shall be obligated to, advance moneys for any such purpose so long as such moneys are derived from a source legally available for such purpose and may be legally used by the City for such purpose.

(b) The obligation of the City to make the Installment Payments is a special obligation of the City payable solely from such Net System Revenues and other funds provided for herein, and does not constitute a debt of the City or of the State of California or of any political subdivision thereof within the meaning of any constitutional or statutory debt limitation or restriction.

SECTION 10.02. Benefits of Installment Purchase Agreement Limited to Parties. Nothing contained herein, expressed or implied, is intended to give to any person other than the City, the Corporation or the assigns of the Corporation and any Credit Provider any right, remedy or claim under or pursuant hereto, and any agreement or covenant required herein to be performed by or on behalf of the City or the Corporation shall be for the sole and exclusive benefit of the other party.

SECTION 10.03. Amendments. (a) This Installment Purchase Agreement may be amended with respect to a Series of Installment Payment Obligations in writing as may be mutually agreed by the City and the Corporation, with the written consent of any Credit Provider for any Installment Payment Obligations or, as to Installment Obligations for which there is no Credit Support Instrument, the Owners of a majority in aggregate principal amount of such Series of Installment Payment Obligations then Outstanding, provided that no such amendment shall (1) extend the payment date of any Installment Payment, or reduce the amount of any

Installment Payment without the prior written consent of the Owner of each Obligation so affected; or (2) reduce the percentage of Installment Payment Obligations the consent of the Owners of which is required for the execution of any amendment of this Installment Purchase Agreement without the prior written consent of each of the Owners so affected.

(b) This Installment Purchase Agreement and the rights and obligations of the City and the Corporation hereunder may also be amended or supplemented at any time by an amendment hereof or supplement hereto which shall not adversely affect the interests of the Owners of the Installment Payment Obligations and which shall become binding upon execution by the City and the Corporation, without the written consents of any Owner of Installment Payment Obligations or any Credit Provider, but only to the extent permitted by law and only upon receipt of an unqualified opinion of Bond Counsel to the effect that such amendment or supplement is permitted by the provisions of this Installment Purchase Agreement and is not inconsistent with this Installment Purchase Agreement and does not adversely affect the exclusion of the interest portion of the Installment Payments received by the Owners from gross income for federal income tax purposes, and only for any one or more of the following purposes:

(1) to add to the covenants and agreements of the Corporation or the City contained in this Installment Purchase Agreement other covenants and agreements thereafter to be observed or to surrender any right or power herein reserved to or conferred upon the Corporation or the City;

(2) to cure, correct or supplement any ambiguous or defective provision contained in this Installment Purchase Agreement or in regard to questions arising under this Installment Purchase Agreement, as the Corporation or the City may deem necessary or desirable;

(3) to make other amendments or modifications which shall not materially adversely affect the interests of the Owners of the Installment Payment Obligations;

(4) to provide for the issuance of Parity Installment Payment Obligations; and

(5) to provide for the issuance of Subordinated Obligations.

SECTION 10.04. Successor Is Deemed Included in all References to Predecessor.

Except as otherwise provided herein, whenever either the City or the Corporation is named or referred to herein, such reference shall be deemed to include the successor to the powers, duties and functions that are presently vested in the City or the Corporation, and all agreements and covenants required hereby to be performed by or on behalf of the City or the Corporation shall bind and inure to the benefit of the respective successors thereof whether so expressed or not.

SECTION 10.05. Waiver of Personal Liability. No official, officer or employee of the City shall be individually or personally liable for the payment of the Installment Payments, but nothing contained herein shall relieve any official, officer or employee of the City from the performance of any official duty provided by any applicable provisions of law or hereby.

SECTION 10.06. Article and Section Headings, Gender and References. The headings or titles of the several articles and sections hereof and the table of contents appended hereto shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof, and words of any gender shall be deemed and construed to include all genders. All references herein to "Articles," "Sections" and other subdivisions or clauses are to the corresponding Articles, Sections, subdivisions or clauses hereof; and the words "hereby," "herein," "hereof," "hereto," "herewith" and other words of similar import refer to the Installment Purchase Agreement as a whole and not to any particular Article, Section, subdivision or clause hereof.

SECTION 10.07. Partial Invalidity. If any one or more of the agreements or covenants or portions thereof required hereby to be performed by or on the part of the City or the Corporation shall be contrary to law, then such agreement or agreements, such covenant or covenants or such portions thereof shall be null and void and shall be deemed separable from the remaining agreements and covenants or portions thereof and shall in no way affect the validity hereof

SECTION 10.08. Assignment. This Installment Purchase Agreement and any rights hereunder may be assigned by the Corporation, as a whole or in part, without the necessity of obtaining the prior consent of the City. The assignment of the Installment Purchase Agreement or rights hereunder or under a Supplement to a Trustee is solely in its capacity as Trustee and the duties, powers and liabilities of the Trustee in acting hereunder shall be subject to the provisions of the Issuing Instrument.

SECTION 10.09. Net Contract. This Installment Purchase Agreement shall be deemed and construed to be a net contract, and the City shall pay absolutely net during the term hereof the Installment Payments and all other payments required hereunder, free of any deductions and without abatement, diminution or setoff whatsoever.

SECTION 10.10. California Law. This Installment Purchase Agreement shall be construed and governed in accordance with the laws of the State of California.

SECTION 10.11. Notices. All written notices to be given hereunder shall be given by first class mail, postage prepaid, courier or hand delivery to the party entitled thereto at its address set forth below, or at such other address as such party may provide to the other party in writing from time to time, namely:

If to the City:	City of San Diego
	City Administration Bldg.
	202 C Street, Mail Station 9B
	San Diego, California 92101
	Attn: Chief Financial Officer

If to the
Corporation: San Diego Facilities and Equipment Leasing
Corporation
c/o Office of the City Attorney
1200 Third Street, Suite 1100, Mail Station 59
San Diego, California 92101
Attn: Deputy City Attorney

With a copy to: City of San Diego
202 C Street, Mail Station 9A
San Diego, California 92101
Attn: Chief Financial Officer

SECTION 10.12. Effective Date. This Installment Purchase Agreement shall become effective as to Installment Payments provided for in a Supplement upon the execution and delivery of such Supplement or as otherwise specified therein, and shall terminate as to such Supplement when the Installment Payments contemplated by such Supplement shall have been fully paid or prepaid (or provision for the payment thereof shall have been made as provided herein).

SECTION 10.13. Execution in Counterparts. This Installment Purchase Agreement and each Supplement may be executed in several counterparts, each of which shall be deemed an original, and all of which shall constitute but one and the same instrument.

SECTION 10.14. Exhibits. All exhibits referenced herein are incorporated into and made a part of this Installment Purchase Agreement.

SECTION 10.15. Sole Instrument. This Installment Purchase Agreement (together with the exhibits attached hereto) shall embody and constitute the sole and entire agreement between the parties hereto with respect to the subject matter hereof.

IN WITNESS WHEREOF, the parties hereto have executed and attested this Installment Purchase Agreement by their officers thereunto duly authorized as of the day and year first written above.

THE CITY OF SAN DIEGO

By Mary Heavin
Chief Financial Officer

(SEAL)

Attest:

Elizabeth M. Oant
City Clerk

**SAN DIEGO FACILITIES AND
EQUIPMENT LEASING CORPORATION**

By JSL
President

Attest:

Mary Heavin
Secretary/Treasurer

APPROVED AS TO FORM:

JAN I. GOLDSMITH,
City Attorney of the City of San Diego

By Jan M. Oant
Deputy City Attorney

EXHIBIT A

DESCRIPTION OF 1998 PROJECT

Pursuant to Section 3.02 of the Installment Purchase Agreement, this Exhibit A may be amended from time to time and at any time to modify or amend the description of the Project, to eliminate any part thereof and/or to substitute a Component or Components, all without obtaining any consent, by filing an amended Exhibit A with the Corporation and the affected Trustee; provided, however, that no such amendment shall in any way impair the obligations of the City contained in any Supplement executed and delivered prior to any such amendment.

732290 **65th & Herrick Water Pump Plant**

This project includes the construction of a new pump plant equipped with three variable speed pumps and one backup pump and motor. The new facility will be constructed of concrete with architectural treatment to blend well into the surrounding environment. Each pump will be able to pump water within a range of 550 gpm to 1,300 gpm with a total dynamic head (TDH) of 80 feet to 150 feet, respectively.

\$1,817,032 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

733101 **AA – Corrosion**

This is an annual allocation to fund the installation of corrosion protection facilities (such as “anode beds” and “deep well anodes”) to extend the service life of existing facilities.

\$822,586 or 13% of the total cost of this project is funded from current bond issue (including reimbursement).

730018 **AA – Reclaimed Water Extension**

Extensions of the north City reclaimed water distribution pipeline network beyond the sphere of influence of the existing north City area and improving the reclaimed water distribution system as the demands for reclaimed water increase.

\$2,710,796 or 34% of the total cost of this project is funded from current bond issue (including reimbursement).

73083 **AAA – Water Main Replacements**

Water mains that were installed in the City’s water distribution system in the 1930’s to the late 1940’s were made of cast iron. The intended service life of these lines was 50 years, and they have gradually deteriorated due to the corrosive soils. In the 1960’s, the Water Department began a systematic effort to identify and replace aging cast iron water mains. At that time there were approximately 600 miles of cast iron lines installed throughout the system. Today, approximately 214 miles of cast iron pipes remain which must be replaced. This project continues the funding to replace those mains. At the present time, approximately 80 percent of

the City's annual water main breaks are attributed to cast iron mains, yet they comprise only 7 percent of the entire water delivery infrastructure. In 1997, approximately 19 miles were completed. An additional 67 miles were in various stages of design and the balance of 147 miles remains in planning and project development. The cast iron water main replacement program included in this bond program is estimated to complete a total of 96 miles through the year 2008. The balance of 118 miles is scheduled for completion in subsequent capital programs.

Under current City policy, concrete sewer and cast iron water mains situated in the same public right-of-way are replaced at the same time to avoid an additional \$65 million in costs for twice-repeated service disruptions, street resurfacings, traffic impacts, and contractual actions.

\$55,321,064 or 63% of the total cost of this project is funded from current bond issue (including reimbursement).

732630 **AA – Water Pump Plant Relocation**

Two water pump plants have been identified for rehabilitation under this CIP. They are the Catalina Water Pump Plant and the Del Cerro Highlands Water Pump Plant. See SubCIP No. 738424 for more detailed information of the Del Cerro Highlands Water Pump Plant.

0% of the total cost of this project is funded from current bond issue (including reimbursement).

733330 **Air Valve Adjustments**

This activity includes raising approximately 429 existing air and vacuum release valve vents and air release valves from below grade vaults to above-ground vaults, enclosed in 3/16" steel cylinders and mounted on concrete pads (in accordance with City of San Diego Standard Drawing No. SDW-117).

\$906,323 or 58% of the total cost of this project is funded from current bond issue (including reimbursement).

732610 **Alvarado Filtration Plant Expansion**

This project is the expansion of the existing Alvarado Water Treatment Plant in two or three phases from the current treatment capacity of 120 mgd to 210 mgd, and improve the plants operating performance to comply with improved treatment standards. The Alvarado Filtration Plant was constructed in 1951 for an initial capacity rating of 66 million gallons per day (mgd) with future expansion capability to 100 mgd. It was expected that one additional flocculation & sedimentation basin and four additional filters would be constructed at some later date to achieve the 100 mgd capacity. Several hydraulic improvements were made in the mid-1970's to increase the plant's hydraulic capacity from the initial 66 mgd to the current 120 mgd without constructing the additional basin and filters. The recent peak water demand day has approached 130 mgd which exceeds the maximum plant capacity.

The initial phase of the expansion program will increase the capacity from 120 mgd to 150 mgd which will meet the projected water demand through 2015. The plant will also be upgraded to meet the Safe Drinking Water Act standards and rehabilitated to restore deteriorated facilities.

The expansion, upgrade and rehabilitation work will involve: rapid mix facility, existing filters, raw water chemical building, finish water chemical building, operation building, Lake Murray and College Ranch Pump Stations, main switchgear building, yard piping, instrumentation and control, electrical and civil/site work, ozone facilities, existing flocculation and sedimentation basins, new flocculation and sedimentation basins, new tillers, and sludge handling facilities (see attached sheet with proposed system upgrades and expansions).

\$89,926,365 or 64% of the total cost of this project is funded from current bond issue (including reimbursement).

732581 **Alvarado JT Lab – HVAC Ventilation**

Upgrade of Heating Ventilating & Air Conditioning system at the Alvarado Joint Water Quality Laboratory.

\$383,137 or 84% of the total cost of this project is funded from current bond issue (Including reimbursement).

732611 **Alvarado Phase II – Operations Building**

Design services for project which involves renovation to existing Operations Building, to be constructed as part of the Alvarado Phase II Project.

\$31,206 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

732612 **Alvarado Phase III – Lake Murray**

Design services for expansion of the Lake Murray Pump Station, to be constructed as part of the Alvarado Phase I project.

\$44,708 or 100% of the total cost of this project is funded from current bond issue including reimbursement).

733270 **Alvarado Water Pump Plant – Upgrade**

The existing pump plant, built in 1965, consists of 4 Byron Jackson pumps rated at 3,500 gpm and 130-feet TDH. Motors are General Electric 150 horsepower. This pump station provides emergency supply to portions of the Miramar system including Kearny Mesa and Tierrasanta.

This project includes replacing the existing pumps, electrical system and control system and rehabilitating the existing building.

\$296,986 or 51% of the total cost of this project is funded from current bond issue (including reimbursement).

733170 **Barrett Reservoir Outlet Tower Upgrade**

The existing Barrett Reservoir dam is a concrete gravity structure with a 120-foot high outlet tower and 26 automatic flash gates located on the spillway.

The required outlet tower repairs include:

Replace 3 each 30-inch gate valves. New valves to include motor operators. Provide hand-off switches located at top of tower. (Existing power to the tower is adequate for the proposed motor operators). Replace 3 each 30-inch cast iron, fabricated "saucer valves" on the exterior of the tower.

Replace 30-inch diameter piping Inside outlet tower including approximately 120 feet of pipe and 4 TEE's. Replace 3 each, operating platforms, 14-feet, 8-inch diameter at the level of each gate valve. Replace motorized winch, sheaves and cable.

Required spillway repairs include replacing or repairing 26 each 6.5-foot wide by 9-foot high spillway flash gates. Existing gates are fabricated of 3/16-inch plate with stiffeners, water stops, trunnions and other appurtenances. Protective coatings and cathodic protection needed for either repairs or replacement.

0% of the total cost of this project is funded from current bond issue (including reimbursement).

732360 **Bayview Reservoir**

This project consists of replacing an existing 10-million gallon, partially buried concrete reservoir with a new reservoir with the same capacity at the same site. The existing reservoir has deteriorated and is failing.

\$6,055,446 or 50% of the total cost of this project is funded from current bond issue (including reimbursement).

732650 **Bayview Water Pump Plant**

This project is the construction of a new pump plant at the Bayview Reservoir and installing 522 linear feet of 20-inch CML&C welded steel pipe to serve as a reservoir by-pass line. Also included in the project are minor paving and landscaping restorations to the site.

\$783,509 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

732160 **Black Mountain Reservoir**

This project consists of the construction and funding of a 15 million gallon reservoir by developers near the City's No. 10 water connection to the County Water Authority's Second Aqueduct, immediately west of Rancho Penasquitos.

\$9,424,779 or 96% of the total cost of this project is funded from current bond issue (including reimbursement).

709200 **Bonita Pipeline – Phase II**

This project involves the replacement of the existing 24-inch diameter Bonita Pipeline north of Imperial Avenue with new 36-inch diameter cement mortar lined and coated (CML&C) welded steel pipe along Churchward Street and Hilltop Drive. The installation will be within the City of San Diego street right-of-way. The majority of construction will be open cut trench installation, with the installation of four 500-foot long, 46-inch diameter steel casings under Interstate 805 and Interstate 15, using tunneling/pipe jacking techniques.

\$1,058,931 or 11% of the total cost of this project is funded from current bond issue (including reimbursement).

759105 **Catalina Standpipe Connection / Navy**

This project consisted of installing a connection from the Catalina Standpipe to the water distribution network on the Naval base. The work was completed by the Navy.

0% of the total cost of this project is funded from current bond issue (including reimbursement).

734006 **Catalina Standpipe Renovation**

The Catalina Standpipe is 73 feet tall, 59 foot in diameter, has a storage capacity of 1.5 million gallons, and was built in 1954. This project will provide additional anchor bolts between the existing tank and foundation mat to resolve seismic problems.

\$132,515 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

733094 **Chesterton Standpipe**

The Chesterton Standpipe has a storage capacity of 1 million gallons, and was constructed 1953. It is no longer in service nor beneficial to the operation of the water transmission and distribution system and consequently is to be demolished.

\$334,752 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

733350 **Dams & Appurtenances Mod Study**

This project consists of making repairs and improvements at the existing dams. There are 429 identified projects, each very small, and no formal designs are required. Replacement and repairs have been initiated with work being done by City forces. It Is anticipated that a combination of City forces and contractors will complete the projects. The maximum design effort anticipated for each valve will be two 8-1/2 by 11-inch sketches with the City's Standard Drawing for Air and Vacuum Valve Enclosure.

\$1,059,524 or 71% of the total cost of this project is funded from current bond Issue (including reimbursement).

732680 **Deerfield Water Pump Plant**

This project Includes replacing the existing underground Hillandale Pump Plant with a new water pump plant located on Mission Gorge Road across from Deerfield Street. Land for this purpose was acquired in 1995. The project includes a pump plant rated at 9,000 gallons per minute(gpm) and 13,000 linear feet of 24-inch diameter pipe to connect the pump plant to the San Carlos area water system. The pump plant Includes: four (4) vertical turbine pumps (each 2,500 gpm @ 350 ft. head), on-site suction and discharge piping including valves, power and I&C system, and a concrete masonry unit building (50 ft. x 42 ft.). The work also Includes demolition of the existing Hillandale Water Pump Plant.

\$6,158,218 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

738424 **Del Corm Highlands Pump Plant**

The existing buried pump station (22 feet x 12 feet, plus stair well) will be expanded to 50 feet x 12 feet, plus stairwell. In the newly expanded space, two 75 horsepower vertical turbine pumps and two 25 horsepower vertical turbine pumps will be installed. The 25 horsepower pumps will have variable speed drives. A 140 Kw, natural gas driven engine/generator will be installed in the existing pump room after removal of the existing pumps to assure continued operation during emergencies. Floor elevation of new structure is 14 feet below grade. Structure will be located predominately in parkway with piping connections within the street.

\$458,175 or 75% of the total cost of this project is funded from current bond issue (including reimbursement).

733091 **Del Cerro Reservoir Upgrade**

The Del Cerro Reservoir is a covered concrete reservoir with a storage capacity of 0.5 Million gallons, constructed in 1956. A 1992 report recommended that a number of improvements to the facility and site be made. Recommendations included improvements to the site safety conditions, sanitary facilities, interior and exterior surfaces as well as structural upgrades.

\$884,118 or 98% of the total cost of this project is funded from current bond issue (including reimbursement).

732510 **Del Mar Heights Road Pipeline**

The project is the installation of 8,000 linear feet of 24-inch diameter cement mortar lined & coated (CML&C) welded steel pipe along a new section of Del Mar Heights Road.

\$0 or 0% of the total cost of this project is funded from current bond issue (including reimbursement).

722910 **Eichenlaub Ranch Acquisition**

The subject parcel is sought for the following reasons: watershed preservation, access to facilities at Barrett Reservoir, to enhance wildlife and habitat values, and to provide possible environmental mitigation credit. This acquisition which involves six contiguous parcels, totaling 1,339 acres, would ensure that the property will remain undeveloped in perpetuity. In addition, the City's main access to facilities at Barrett Reservoir is a road that crosses this property (the "Wilson Creek Road"). The City's right to use this road is suspect, and has come under question in the past. This situation would be eliminated with the acquisition of the parcel.

\$4,600,000 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

733190 **El Capitan Reservoir Rd Improvements**

Approximately 2.5 miles of access road, starting at the base of the dam and proceeding counterclockwise around the reservoir to the southern tip of the lake will be repaired and portions need widening in this project. Three existing observation wells on the downstream face have badly corroded casings and do not function. They will be replaced with three new observation wells with 4-inch casings and the following depths: 175-feet, 150-feet and 125-feet deep. The top 10 to 30 feet of the wells must be drilled through hand placed boulders. Each well will be equipped with piezometers to measure water levels, with signals transmitted to existing radio towers.

\$294,108 or 54% of the total cost of this project is funded from current bond issue (including reimbursement).

733097 **Emerald Hills Standpipe Upgrade**

The Emerald Hills Standpipe is located on an alleyway between Eider Street and Scimitar Drive. The standpipe sits along a ridge, with single-family housing immediately adjacent to and below the structure. Built in 1962, the standpipe is 52 feet in diameter with a steel shell height of 96 feet and a conical roof extending 2 feet above the shell. This project includes seismic retrofit work to withstand substantial earthquakes.

\$104,066 or 77% of the total cost of this project is funded from current bond issue (including reimbursement).

734000 **Encanto Standpipe**

This project entails the demolition of the existing standpipe, relocation of existing utilities, site improvements, and installation of a new sprinkler system for the existing landscaping.

\$304,632 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

709110 **Genesee Avenue Subsystem**

This system will distribute reclaimed water from the North City Water Reclamation Plant to areas west of the plant, particularly Torrey Pines Golf Course, Caltrans right-of-way, and UCSD. The pipe commences as a 36-inch diameter pipe starting at the west portal of the North City Tunnel Connector west of interstate 805, then proceeding northwesterly to and along Executive Drive. The pipeline continues as a 24-inch pipe and proceeds northerly along Regents Road to Genesee Avenue, then westerly along Genesee Avenue across Interstate 5 to the intersection of Genesee Avenue and North Torrey Pines Road. A 16-inch pipe proceeds northerly to the North Course meter at Torrey Pines Golf Course, and southerly to the South Course meter connection.

Turnouts to Caltrans right-of-way at Interstate 5 and Genesee Avenue and UCSD will be provided along the pipe alignment.

\$8,260,669 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

733360 **Joint Lab Standby Emergency Power**

Install a 275 Kw (preliminary size estimate) emergency engine/generator for the Joint Laboratory at the Alvarado Filtration Plant. The generator will provide power to five labs (M-10, J-11, P-10, R-10 and R-30), the north air handler and two exhaust fans. In the event of any electrical power failure. The engine/generator will be installed outside with concrete screen walls (retaining wall may be required) for aesthetics and sound dampening.

\$8,300 or 0% of the total cost of this project is funded from current bond issue (including reimbursement).

733010 **Kearny Mesa Pumps**

This project is the construction of a new water pump plant with three 5 mgd pumps. The pump plant will pump water from the Alvarado Zone (536) to the Northwest Mesa Zone (currently 559, but will be raised to 600). Emergency power will be provided by portable, engine-generator sets. The pump plant will connect to the existing 36-inch Kearny Mesa Pipeline.

\$137,618 or 7% of the total cost of this project is funded from current bond issue (including reimbursement).

734002 **La Jolla Country Club Reservoir**

The La Jolla Country Club Reservoir is a concrete reservoir, with a storage capacity of 0.5 million gallons, and was constructed in 1927. This project includes repairs to the facility to improve safety, sanitation, appurtenances, and exterior and interior surfaces.

\$25,629 or 31% of the total cost of this project is funded from current bond issue (including reimbursement).

734008 **La Jolla Exchange Place Reservoir**

The La Jolla Exchange Place Reservoir is a covered concrete reservoir, with a storage capacity of 0.99 million gallons. It was constructed in 1955.

This project includes repairs required for site improvements, safety, sanitation, appurtenances, and exterior and interior protective coatings.

\$11,200 or 10% of the total cost of this project is funded from current bond issue (including reimbursement).

734007 **La Jolla View Reservoir**

The La Jolla View Reservoir is a steel tank, measuring 70-feet in diameter by 25-feet high, with a storage capacity of 0.72 million gallons. It was built in 1949. This project includes repairs and site improvements to improve safety, sanitation, appurtenances, exterior and interior protective surfaces, and structural integrity.

\$20,901 or 8% of the total cost of this project is funded from current bond issue (including reimbursement).

732830 **Lakeside Pump Plant**

This project involves the upgrade of the existing Lakeside Pump Plant by replacing the existing pumps and motors to increase the capacity to 110 MGD @ 165 feet of head as a result of the City's Reservoir Management Study (May 1995). Design and construction of the major renovation items will include new pumps, motor starters, valves, metering devices, facilities, and the complete automation of the pump plant in coordination with the Alvarado Treatment Plant.

\$950,935 or 9% of the total cost of this project is funded from current bond issue (including reimbursement).

733098 **Lomita Village Standpipe Removal**

The Lomita Village Standpipe is located at the corner of Skyline Drive and Bowie Street. The Standpipe is 38 feet in diameter, with a steel shell height of 95 feet, and an umbrella roof extending 2 feet above the shell. This reservoir, which was built in 1953, will be demolished under this program.

\$300,414 or 99% of the total cost of this project is funded from current bond issue (including reimbursement).

733430 **Lower Otay Reservoir**

The existing Savage Dam backs up Lower Otay Reservoir. At the present time, fifty-six days are required for 10 percent draw down of the reservoir through the existing 40-inch (48-inch prior to slip lining) outlet pipe. State regulation requires 10 percent draw down in 10 days.

This project will increase the draw down capacity by installing dual 48-Inch drain pipes through the existing auxiliary spillway (in addition to existing 40-inch described above). Installation will include two 48-inch butterfly valves and 48-inch flap gates on the spillway bulkheads and intake screens on the upstream end. Length of each pipe will be 70-feet. Maximum existing grade over the pipes is approximately 10-feet above the intended drain pipe invert.

\$56,700 or 17% of the total cost of this project is funded from current bond issue (including reimbursement).

732460 **Mid-City Pipeline**

The original scope of work for this project included the Installation of 24,955 linear feet of new 48-inch diameter cement mortar lined & coated (CML&C) steel pipe primarily along El Cajon Boulevard and 37th Street.

Following a Value Engineering Study and the conclusions from a recent Mid-City Planning Study (April 1998), portions of the pipeline alignment have been modified. The changes include:

the pipeline between Highland Avenue and Marlborough Avenue, a total of 2,300 linear feet, has been reduced from 48-inch diameter to 24-inch;

the pipeline between Marlborough Avenue to Cherokee Avenue, total length of 3,492 linear feet, has been reduced from 48-inch diameter to 20-inch;

3,860 linear feet of pipeline on 37th St. and two pressure reducing valves (PRV) stations located at Myrtle & 37th St. and Wightman & 37th St. were; and

approximately 1,300 linear feet of 48-inch pipeline and a PRV station on Highland Avenue between El Cajon Boulevard and Polk Avenue have been added.

\$19,695,901 or 99% of the total cost of this project is funded from current bond issue (including reimbursement).

733140 **Mid-City Water Pump Plant**

This project is the construction of a pump plant to feed the Mid-City Pipeline from the Alvarado Water Treatment Plant. This pump plant is part of a proposed Mid-City Pipeline to provide required redundancy for, and to relieve the capacity load on, the existing Trojan Pipeline which is the "backbone" transmission facility of the Alvarado water supply system. To avoid the high cost of crossing Interstate 8 (I-8), the pump plant discharge pipe will be connected to the San Diego County Water Authority's (SDCWA's) Pipeline 4B at a location north of Interstate 8, water will be taken out of Pipeline 4B south of Interstate 8 at the future Mid-City Pipeline connection.

The pump plant will have a total capacity of 155 cubic feet per second (cfs). The project flow rate at the Mid-City Pipeline is 93 cfs and the balance, 62 cfs will be used by the SDCWA. An emergency generator and fuel tank with secondary containment system will also be provided.

Approximately 1,000 feet of 72-inch diameter steel pipe will be installed to transmit water from the Alvarado Filtration Plant into the SDCWA's La Mesa/Lemon Grove Pipeline.

\$13,331,823 or 89% of the total cost of this project is funded from current bond issue (including reimbursement).

709105 **Miramar Pipeline Improvements – Phase III**

This project consists of replacing and/or rehabilitating 14,400 linear feet of existing 51-inch cylinder pipe on Mira Mesa Boulevard between Stadium Street and Weston Hill Drive. It is expected that the project will be a combination of pipe replacement with 54-inch diameter cement mortar lined & coated (CML&C) steel pipe and/or rehabilitation of the existing pipe. The rehabilitation will include the installation of a welded steel liner, grouted into position and cement mortar lined. The existing pipeline can only be shut down during the winter months (November through April) and all construction work must be conducted at night to minimize impact to traffic and business impacts along Mira Mesa Boulevard. The City will be establishing an Inspection Program to ascertain the existing pipe condition. Dependent upon the outcome of the inspection, this project may be modified.

\$1,869,520 or 17% of the total cost of this project is funded from current bond issue (including reimbursement).

709106 **Miramar Pipeline Improvements – Phase IV**

This project includes the replacement of/or rehabilitation of 12,470 linear feet of existing 51-inch diameter prestressed concrete cylinder pipe along Mira Mesa Boulevard and Scripps Lake Drive. Preliminary planning includes a combination of pipe replacement with 54-inch diameter cement mortar lined & coated (CML&C) steel pipe and/or rehabilitation. The rehabilitation will consist of the Installation of a welded steel liner, grouted into position and cement mortar lined. The existing pipeline can only be shut down during the winter months (November through April) and all construction work must be conducted during that period and at night to minimize impact to traffic and businesses along Mira Mesa Boulevard. The City will establish an Inspection Program to ascertain the existing pipe condition and determine where rehabilitation is appropriate. The project scope may change depending on the study findings.

\$1,516 or 0% of the total cost of this project is funded from current bond issue (including reimbursement).

709102 **Miramar Pipeline Improvements – Phase I**

This project included studies and design for the rehabilitation of the Miramar Pipeline from the Miramar Water Treatment Plant to Interstate 805. This activity is complete.

\$185,516 or 9% of the total cost of this project is funded from current bond issue (including reimbursement).

709103 **Miramar Pipeline Improvements – Phase II**

This project includes the installation of approximately 4,389 linear feet of 54-inch diameter cement mortar lined & coated (CML&C) steel pipe to replace existing deteriorated pipe between Carroll Canyon Road and Mira Mesa Boulevard and the rehabilitation of approximately 400 linear feet of 51-inch diameter pipe along Mira Mesa Boulevard. It is anticipated that the replacement will be accomplished through traditional open cut trench and cover techniques along Pacific Heights Boulevard and 1,000 linear feet of Mira Mesa Boulevard. The pipe rehabilitation will include the installation of a welded steel liner, grouted into position and cement mortar lined. Shut-down of the existing pipeline for rehabilitation is limited to winter months (November through April) and all work will be conducted at night to limit the impact to traffic and businesses along Mira Mesa Boulevard. (Note: The City will internally inspect the pipeline to determine its current condition. Dependent upon the findings of the inspection, the scope of work may change to replace more or less pipe.)

\$4,729,056 or 99% of the total cost of this project is funded from current bond issue (including reimbursement).

733370 **Miramar Pipeline No. 2A**

This project includes the installation of a new transmission pipeline to deliver potable water to the northern coastal and north City areas to accommodate growth in the north City area, ensure system reliability and reduce imported filtered water purchases from the SDCWA.

The pipeline will consist of 11,100 linear feet of 90-inch diameter, 4,500 linear feet of 78-inch diameter, 3,360 linear feet of 66-inch diameter and 9,890 linear feet of 36-inch diameter cement mortar lined & coated (CML&C) welded steel or steel cylinder rod-wrapped pipeline.

The 90-inch diameter section of the pipeline will pass under the Interstate 15 freeway along Carroll Canyon Road and be placed in the extremely congested right-of-way along Scripps Lake Drive between Scripps Ranch Boulevard and the Miramar Pump Station.

\$340,537 or 12% of the total cost of this project is funded from current bond issue (including reimbursement).

730017 **Miramar Road Pipeline**

This project consists of installing 24-Inch diameter 24,000 linear feet of cement mortar lined and coated (CML&C) welded steel pipe along Miramar Road to parallel the existing Miramar Road Pipeline. All of the installation will be within the City of San Diego street right-of-way. Construction will be by traditional open cut trench techniques and pipe jacking/tunneling under major intersections.

\$500,296 or 10% of the total cost of this project is funded from current bond issue (including reimbursement).

709120 **Miramar Road Subsystem**

The Miramar Road Subsystem involves a portion of the reclaimed water distribution subsystem that will ultimately connect to pipelines serving users along the Interstate 15 corridor to the north. The 48-inch diameter pipe will start at the southerly limits of the North City Water Reclamation Plant. The pipeline proceeds easterly along Miramar Road to its terminus at the prolongation of Rigel Avenue. A turnout will be provided at Production Avenue for future northerly users.

\$10,669,064 or 25% of the total cost of this project is funded from current bond issue (including reimbursement).

709160 **Miramar Road Subsystem Extension**

This Miramar Road Subsystem Extension will distribute reclaimed water to users along the interstate 15 corridor to the north. Preliminary alignment for the approximately 17,500 feet of 42-inch pipeline is described as follows: commencing at the terminus of the Miramar Road Subsystem, the pipeline runs east across Interstate 15, then along Pomerado Road to Willow Creed Road, then northward along Willow Creek Road, Business Park Avenue, and Carroll Canyon Road terminating at Scripps Ranch Boulevard.

\$10,166,179 or 39% of the total cost of this project is funded from current bond issue (including reimbursement).

709170 **Miramar Storage Tank and Raw Water Connection**

This system will serve the reclamation needs of the Scripps Ranch North area with subsequent connections to pipelines serving users along the Interstate 15 corridor northward. Preliminary alignment for the approximately 2,500 feet of 42-inch pipeline is described as follows: commencing at the terminus of the Miramar Road Subsystem Extension, then north along Scripps Ranch Boulevard and east to its terminus at a storage facility located at the eastern end of Meanley Drive. This also includes design of an 8 million gallon storage tank. A 2,500 linear foot, 24-inch raw water connection from Miramar Lake to the storage facility is also included.

\$11,916,498 or 35% of the total cost of this project is funded from current bond issue (including reimbursement).

732840 **Miramar Water Treatment Plant**

The Miramar Water Treatment Plant requires upgrades to the facility and treatment process to comply with Safe Drinking Water Act standards, and to meet increasing water demands. This project includes rehabilitation work and new construction. The summer demands now exceed the existing capacity of 140 million gallons per day. The need for increased capacity, deterioration at existing plant facilities, compliance with the standards, and the goal of both the City and the San Diego County Water Authority (SDCWA) to dissolve the City's reliance upon imported filtered water supplies, have all combined to create the need to expand plant capacity to meet projected water demands through 2015, rehabilitate the plant's aging 36-year-old treatment facilities, and upgrade treatment processes including the addition of an ozonation process.

\$8,812,743 or 9% of the total cost of this project is funded from current bond Issue (including reimbursement).

733300 **Mission Valley Aquaculture Facility Demolition**

Demolition of a demonstration pilot water reclamation treatment plant which used water hyacinth and other alternative methods to remove pollutants.

\$103,696 or 16% of the total cost of this project is funded from current bond issue (including reimbursement).

733210 **Morena Reservoir Outlet Tower Upgrade**

The existing Morena Dam is a rock embankment dam with a parapet wall height of 171 feet above the original stream bed. The outlet tower is 132 feet from the operating floor to the center line of the outlet tunnel. The piping and mechanical system of the outlet tower will be replaced or repaired. A granite boulder and fissure grotto was formed beneath granite blocks by water erosion and carved into a crack in the bedrock. This grotto is approximately 800-feet long and on the order of 20-feet wide and 60-feet high, and extends below the dam. The following repairs are included in the project:

replace each of five 24-inch gate valves with motor operated valves;

refurbish or replace each of three 24-inch square sluice gates;

replace piping including 70-feet of 30-inch pipe, 60-feet of 24-inch pipe, five 30-inch T's, and appurtenances;

replace four valve operating platforms;

provide electrical energy from existing power lines on the shore located a few hundred feet away; and

conduct grotto repairs: grout that portion of grotto located below the dam.

\$0 or 0% of the total cost of this project is funded from current bond issue (including reimbursement).

733380 **Operation Center Relocation**

Develop a Central Water Department Operations Station on an approximately 25-acre site in the Kearney Mesa area to accommodate 640 employees, 340 vehicles and equipment currently located at Cholles Operations Station, Rose Canyon Operations Station, Alvarado Operations Yard and the Comerica Bank Building downtown.

Required facilities:

Office space for 261 employees; 80,000 to 100,00 square feet.

Vehicle Repair Facility; 25,000 square feet of roofed space.

Warehouse Space; 55,000 square feet,

Parking lots and storage yards; 400,000 square feet.

Fuel island and wash racks; 2 - 20,000 gal tanks, 14 dispenser, 7 islands and 3 wash racks.

Site development, utilities, improvements, landscape and irrigation are also required.

\$33,629,526 or 60% of the total cost of this project is funded from current bond issue (including reimbursement).

732862 **Otay 2nd Pipeline – North of SR-94**

This project includes the installation of approximately 6,725 linear feet of 42-inch diameter cement mortar lined & coated (CML&C) steel pipe north of State Route 94 to replace a section of the existing 36-Inch diameter Otay Second Pipeline built in 1928. The majority of the pipe to be replaced will be within the City of San Diego street right-of-way, with some canyon crossings requiring permanent easements. In some locations, the right-of-way may be relocated due to the occurrence of environmentally sensitive habitat. Construction will be mostly open cut trench with some pipe jacking or tunneling under major intersections.

\$951,520 or 33% of the total cost of this project is funded from current bond issue (including reimbursement).

732860 **Otay 2nd Pipeline – Phases 1 thru 6**

This project includes the installation of approximately 30,000 linear feet of 54-inch diameter cement mortar lined & coated (CML&C) steel pipe between Telegraph Canyon Road and State Route 54 to replace that portion of the existing 36-inch and 40-inch diameter Otay Second Pipeline built in 1928. A majority of the installation will be within the City of Chula Vista street right-of-way, with some canyon crossings requiring permanent easements. It is anticipated that construction will be open cut trench and cover with some pipe jacking and/or micro tunneling at major intersections. In some instances the right-of-way may have to be relocated due to occurrence of environmentally sensitive habitat in the existing right-of-way.

\$3,216,894 or 13% of the total cost of this project is funded from current bond issue (including reimbursement).

732500 **Otay Mesa Reservoir**

The Otay Water Treatment Plant does not have a clear well reservoir for chlorine contact time and storage capacity for peak demands. This project is to provide clear well storage capacity to meet rapidly growing needs and will enable the treated water to comply with mandated minimum chlorine contact times for the nearest consumer.

\$449,459 or 13% of the total cost of this project is funded from current bond issue (including reimbursement).

733150 **Otay Plant Raw Water Connection**

An amendment to an existing contract to install additional valves in the flow control facility (metering station) to accommodate the San Diego County Water Authority's conversion of its Pipeline No. 3 from treated to raw water. Pipeline No. 3 conveys water to the Otay Water Filtration Plant. The Otay Water Filtration Plant will now have another source of raw water in addition to its local surface water supply (Otay, Barrett and Morena Lakes).

\$181,924 or 41% of the total cost of this project is funded from current bond issue (including reimbursement).

709100 **Otay Reservoir Raw Water Pipeline**

Engineering and construction services for the rehabilitation of 1,480 linear feet of 48-inch concrete-lined, steel outlet tunnel from the lake, structural modifications to the raw water outlet tower platform, replacement of 36-inch butterfly valve with 48-inch butterfly valve and installation of 48-inch saucer valve and elbow at the base of the outlet tower. Installation of bypass pumping system to provide water to the filtration plant during outlet tower/tunnel work.

\$2,078,107 or 99% of the total cost of this project is funded from current bond issue (including reimbursement).

733390 **Otay WTP Basin Corrosion Repairs**

Repair the existing sedimentation basins, flocculation basins and influent channel at the Otay Filtration Plant. Over 59,000 square feet of concrete in these facilities will be repaired and coated as a part of this project.

\$1,031,199 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

732850 **Otay WTP Expansion**

This project will upgrade the existing Otay Water Treatment Plant to comply with Safe Drinking Water Act standards (Phase I). Also, depending on the outcome of future studies, it may be expanded from the current 40 mgd capacity to 60 mgd to accommodate water demands (Phase II) in the Otay Mesa area. Only the upgrade is proposed at this time.

The Phase 1 project will include: ozonation facilities (ozone generator and ozone contactors) to provide pre-and post-ozonation; GAC filter caps for existing filters; wash water recovery system; sludge handling; electrical & instrumentation system; and other improvements including site work, yard piping and provision for future facilities.

\$151,807 or 1% of the total cost of this project is funded from current bond issue (including reimbursement).

733220 **Otay WTP Raw Water Pump Conversion**

The existing Pump Station consists of one 8 mgd pump, three 15 mgd pumps, and platforms for two additional pumps.

This project entails installation of a variable speed drive to one of the existing 15 mgd, 300 Hp pumps.

\$253,238 or 60% of the total cost of this project is funded from current bond issue (including reimbursement).

73277D **Pacific Beach Reservoir**

The Pacific Beach Reservoir is currently disconnected from the water system because of severe leakage. It is currently a dry reservoir. A planning study will be prepared to determine if this reservoir can be taken out of service permanently or if the reservoir should be rehabilitated and connected back to the water system.

\$201 or 0% of the total cost of this project is funded from current bond issue (including reimbursement).

733099 **Paradise Hills Standpipe**

The Paradise Hills Standpipe will be demolished under this program.

\$562,906 or 100% of the total cost of this project is funded from current bond Issue (including reimbursement).

733460 **Paradise Mesa Pump Plants 1 & 2 Upgrade**

The existing Paradise Mesa Pump Plant No. 1, built in 1964, and the Paradise Mesa Pump Plant No. 2, built in 1971, each consist of three vertical turbine pumps each rated at 2,250 or 2,275 gallons per minute. Each of the pumps are 100 horsepower and each were manufactured by a different company. These pump plants serve an area of approximately 30,000 residents.

This project entails upgrading existing pump plants to allow substitution of San Diego City water for San Diego County Water Authority (SDCWA) water now provided via the SDCWA #19 (Old # 13) Paradise Mesa Crosstie tandem, which is currently the primary supply of water to the Paradise Mesa 610 Pressure Zone. The estimated size of each pump station after upgrade will be 600 Hp.

\$136,861 or 12% of the total cost of this project is funded from current bond issue (including reimbursement).

734005 **Paradise Mesa Standpipe**

The Paradise Mesa Standpipe was erected in 1979. It is 120-feet tall and has a diameter of 64-feet, with a capacity of 2.5 million gallons. This standpipe services the 610 Pressure Zone.

Current seismic standards require that the standpipe be retrofitted at the foundation to reduce the chances of failure in the event of an earthquake. Also, due to health risks, the lead-based interior and exterior coatings require removal. Other work will include upgrades to the access road and appurtenances.

\$530,823 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

749251 **Penasquitos Reservoir Upgrade**

The Penasquitos Reservoir is a post-tensioned concrete tank, with a storage capacity of 5 million gallons. It is 34 feet high by 160-foot diameter, and was constructed in 1966.

This project includes minor repairs to existing appurtenances, an investigation of the physical condition of prestressed wire by removal of exterior shotcrete covering, and provision of flexible pipe connections at base of tank wall for seismic resistance.

\$31,500 or 12% of the total cost of this project is funded from current bond issue (including reimbursement).

732092 **Point Loma Reservoir**

Point Loma Reservoir is a partially buried, 21-foot deep concrete reservoir with a 1.5 acre surface area. It has a storage capacity of 10 million gallons. A recent study identified the following needed improvements: remove and replace the wood roof; install a Hypalon lining; provide site improvements; provide skin improvements; and install a concrete Shear Wall System.

\$3,109,378 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

734004 **Pomerado Park Reservoir Upgrade**

The Pomerado Park Tank has a capacity of 5.2 million gallons, and was constructed in 1969. This project includes safety, sanitation, appurtenance, exterior and interior surface, and structural improvements.

\$37,079 or 8% of the total cost of this project is funded from current bond issue (including reimbursement).

732480 **Pomerado Pipeline No. 2**

This project consists of purchasing the existing Pomerado Pipeline, which runs between the Miramar Filtration Plant and the Tierrasanta area, from the San Diego County Water Authority (SDCWA). The Pomerado Pipeline, originally installed by the City in the late 1960's, was sold to the SDCWA to function as an imported water transmission pipeline in their aqueduct system. Subsequently, as a result of the installation of a metered connection to their filtered water aqueduct system, the City became totally reliant upon the SDCWA to supply the southern

reaches of the Miramar distribution system. Through a cooperative effort, both the City and the SDCWA have agreed to eliminate this reliance through the City's repurchase of this pipeline. The pipeline will be returned to its original function as a gravity supply from the Miramar Filtration Plant.

\$1,938,563 or 66% of the total cost of this project is funded from current bond issue (including reimbursement).

733400 **Potable Water Storage Recirculation**

Eight existing potable water storage facilities of one-million gallon capacity or more will be equipped with a water recirculation system consisting of pumps and piping capable of exchanging the entire volume of the reservoir with water from an adjacent water main once every 10 days. The pumps will run continuously at a small flow rate to slowly exchange the entire volume of the reservoir. The reservoirs being considered for this project are: Redwood Village, Emerald Hills, University Heights, Point Loma, La Jolla Exchange Place, La Jolla View, Bayview and Paradise Mesa. .

\$265,730 or 16% of the total cost of this project is funded from current bond issue (including reimbursement).

733470 **Program Management (Parsons)**

Under this CIP number, the Water Department CIP Program team is augmented with engineers and other specialized personnel to complete the implementation of projects on schedule. Those services are being provided by Parsons Infrastructure and Technology, Inc. The personnel provided by Parsons are integrated into the CIP staff and provide engineering, scheduling, cost estimating and environmental compliance services.

\$12,952,317 or 35% of the total cost of this project is funded from current bond issue (including reimbursement).

733410 **Rancho Bernardo Pipeline No. 2**

This project includes the installation of 1,700 linear feet of 48-inch diameter cement mortar lined & coated (CML&C) welded steel pipe along Scripps Ranch Boulevard, 2,800 linear feet of 48-inch diameter CML&C steel pipe along Mira Mesa Boulevard, 6,850 linear feet of 48-inch diameter CML&C steel pipe along Westview Parkway, 1,600 linear feet of 48-inch and 7,550 linear feet of 42-inch diameter CML&C steel pipe along Black Mountain Road, and 4,750 linear feet of 42-inch diameter CML&C steel pipe along Twin Trails Drive.

\$1,354,898 or 10% of the total cost of this project is funded from current bond issue (including reimbursement).

733420 **Rancho Bernardo Pump Plant No. 2**

Construct a new 15 mgd pump station with a Total Dynamic Head of 200-feet.

\$521,607 or 15% of the total cost of this project is funded from current bond issue (including reimbursement).

734280 **Rancho Bernardo Reservoir Upgrade**

This project includes the rehabilitation of the existing 10.1 million gallon, earth embankment, concrete-roofed, Rancho Bernardo reservoir. Inside dimensions of the reservoir at the control line are 322' x 250' x 26' deep and 216' x 144' at the base. Roof structure is pre-cast prestressed columns, beams and girders with a post-tensioned concrete roof slab. The lateral loads are carried by concrete shear walls with a plan view "H" shape. The floor is asphalt paved and butyl rubber lined. The perimeter stern wall is approximately 3 feet high.

The improvements to the reservoir include the removal of the damaged coating from most concrete surfaces including both sides of roof, beams, 72 columns and shear walls. Repair spalled concrete, remove the existing liner from floor and walls and replace with 86,000 square feet of Hypalon liner and geotech material. Two new 24-inch modulating valves will also be installed in an adjacent vault. Install new vault with 36-inch propeller flow meter, increase the thickness of the shear walls, and make repairs to various electrical equipment and appurtenances.

\$495,616 or 16% of the total cost of this project is funded from current bond issue (including reimbursement).

733096 **Redwood Village Standpipe – Phase I**

Redwood Village Standpipe, Phase I (construction is complete).

The Redwood Village Standpipe is a circular steel standpipe constructed in 1964 with a capacity of 2 million gallons. The facility upgrade included seismic retrofit and general-improvement of the facility piping. This project was completed in early 1998.

\$1,634,614 or 0% of the total cost of this project is funded from current bond issue (including reimbursement),

738472 **Redwood Village Standpipe – Phase II**

The Redwood Village Standpipe, Phase II project will incorporate additional work at the site, mainly related to replacing pipe and upgrading the pipe connection to the standpipe to avoid shearing off at the tank during an earthquake.

\$0 or 0% of the total cost of this project is funded from current bond issue (including reimbursement).

799999 **Replacement of Water Service Meters**

This project consists of replacing 632 3-inch, 4-inch and 6-inch commercial meters with Metron-Farnier low flow water meters throughout the water system. Two hundred of the targeted meters had already been replaced by October 3, 1997. City forces will replace the

remaining 432 meters and install remote read devices. Backflow protection devices will be installed on the remaining flow meters.

\$1,516,422 or 41% of the total cost of this project is funded from current bond issue (including reimbursement).

749252 **San Carlos Reservoir Upgrade**

The San Carlos Reservoir is a prestressed concrete tank with domed roof. It has a storage capacity of 5.0 million gallons, is 33 feet high by 160 feet diameter, and was constructed in 1963. This project includes removal of the existing interior coating and recoat; debris removal, seismic retrofit of wall to footing linkage; repair of loose concrete; upgrade access, paving, lighting, etc.; inspect/repair post tensioning and pre-stressing wire; and replace submerged metallic structures.

\$91,155 or 34% of the total cost of this project is funded from current bond issue (including reimbursement).

732910 **San Vicente Water Quality System**

The depth and physical geometry of the San Vicente Reservoir cause it to stratify, creating layers of water with different temperatures. The lower depths are typically being cold and low in oxygen. This project is being evaluated using completed studies and available information, and will address the ultimate use of the lake itself which includes the possible introduction of reclaimed water. Depending on the final decision a hypolimnetic aeration system may be installed to improve the water quality for treatment in the water treatment plants.

\$328,603 or 76% of the total cost of this project is funded from current bond issue (including reimbursement).

709210 **Scripps Poway Parkway Subsystem**

The Scripps Poway Parkway Subsystem consists of approximately 10,000 linear feet of 18-inch pipeline and a booster pump station located near its western end, that will convey Title 22 tertiary effluent. Preliminary alignment for this project is described as follows: commencing at a tee connection east of the intersection of Scripps Poway Parkway and Interstate 15 (the terminus of Reclaimed Water Distribution System Package V), the pipeline runs easterly along Scripps Poway Parkway to a point approximately 4,000 feet west of the City of Poway/San Diego boundary, where the pipeline will connect to an existing 10-inch reclaimed waterline.

\$7,506,516 or 56% of the total cost of this project is funded from current bond issue (including reimbursement).

709180 **Scripps Ranch Blvd / I-15 Subsystem**

This system will serve the reclamation needs of Scripps Ranch and Interstate 15 corridor areas and ultimately connect to pipelines serving users to the north. Preliminary alignment for the approximately 15,000 feet of 30-inch pipeline is described as follows: commencing at the

Miramar Storage Tank, the pipeline runs along Scripps Ranch Boulevard to Erma Road, where it turns west and continues along Erma Road to the street terminus. The pipeline continues north through the vicinity of the old Frontage Road on the east side of Interstate 15, terminating in a tee connection east of the intersection of Interstate 15 and Scripps Poway Parkway/Mercy Road.

\$6,414,913 or 72% of the total cost of this project is funded from current bond issue (including reimbursement).

734003 **Scripps Ranch Reservoir**

This project includes the removal of lead grout paint, repainting the structure and providing general improvements to the reservoir and site.

\$982,324 or 96% of the total cost of this project is funded from current bond issue (including reimbursement).

73246B **SD 18 Flow Control Facility**

City funds will be used to support the design and construction of the Mid-City Meter Facility (SD-18). This facility will be designed, constructed, owned and operated by the San Diego County Water Authority (SDCWA). Completion of SD-18 will enable treated City water from the Alvarado Treatment Plant (placed in the SDCWA aqueduct through pump station SD-17) to flow into the new Mid-City Pipeline. Flows up to 93 cfs will be taken out of the SDCWA aqueduct and delivered to the new Mid-City Pipeline.

\$2,239,316 or 100% of the total cost of this project is funded from current bond issue (including reimbursement).

732720 **Soledad Reservoir**

The existing Soledad reservoir, a 1.5-million gallon, concrete reservoir built in 1958, it is in a deteriorated condition, and is in danger of failure. The reservoir is 113 feet in diameter, 19'-9" high with a concrete roof. The project is the rehabilitation of the reservoir by lining the interior walls and floors with steel plate.

\$1,642,635 or 97% of the total cost of this project is funded from current bond issue (including reimbursement).

709340 **Sorrento Valley Subsystem**

This project package involves a portion of the RWD system serving users in the southwest Mira Mesa and northwest Miramar portions of the Northern Service Area. This package consists of two segments with a total length of approximately 21,000 linear feet of 10- to 18-inch diameter pipeline. The preliminary alignment for the first segment is as follows: commencing at a tee connection located at Miramar Road and Production Ave (Package 2), the pipeline heads north to Carroll Road, then west along Carroll Road, then along Carroll Canyon Road to the vicinity of the Youngstown Way Intersection. The preliminary alignment for the second segment is as

follows: commencing at a tee connection at Carroll Road and Fenton Road, the pipeline heads east along Fenton Road for approximately 8,000 linear feet.

\$5,410,376 or 22% of the total cost of this project is funded from current bond issue (including reimbursement).

709101 **Sorrento Valley Water Main Replacement**

This project has been completed and is included in the bond program for reimbursement.

\$1,905,148 or 34% of the total cost of this project is funded from current bond issue (including reimbursement).

732490 **South San Diego Pipeline No. 2**

This project consists of the installation of approximately 24,300 linear feet of 42-inch diameter pipeline from the Coronado wye (east of the South San Diego Reservoir) to Interstate 805 and Palm Avenue in the South San Diego/Otay Mesa water service area. This project will be designed and constructed through a participation agreement with TMP Homes, Inc.,

\$13,644,840 or 92% of the total cost of this project is funded from current bond issue (including reimbursement).

733440 **South San Diego Reservoir No. 2**

This project will consist of constructing a new 12.7 million-gallon reservoir located at the site of the existing South San Diego Reservoir and serving the 490 pressure zone.

\$653,520 or 11% of the total cost of this project is funded from current bond issue (including reimbursement).

749254 **South San Diego Reservoir Upgrade**

This project includes the removal of 85,235 square feet of existing lead based interior coating and replace with high solids epoxy coating system. Replacement of one column and minor repairs on other columns. Replacement of 400 linear feet of 0.75 inch tie rods, and installation of a concrete dividing wall.

\$327,581 or 10% of the total cost of this project is funded from current bond issue (including reimbursement).

733080 **Telem Control Sys – SCADA Phase I**

Install centralized state-of-the-art electronic monitoring and control facilities for the water storage, transmission, and system.

\$1,472,285 or 82% of the total cost of this project is funded from current bond issue (including reimbursement).

733081 **Telem Control Sys – SCADA – Phase II**

Install centralized state-of-the-art monitoring and control facilities for the water storage and transmission system. This Phase is the final step to install the complete facilities for telemetry control of the entire system.

\$522,233 or 39% of the total cost of this project is funded from current bond issue (including reimbursement).

733290 **Tierrasanta Norte Water Pump Plant**

This project includes the installation of four end-suction centrifugal pumps inside the existing, unused SD #16 flow control facility. The existing building is 18-feet by 17-feet 8-inches by 10-feet 5.5-inches high. One pump will be a 25 hp (1,200 gpm at 65 feet TDH) and three pumps are 50 hp (2,150 gpm at 65 feet TDH). Roof hatches will be added to the existing building for future installation and removal of the pumps and motors.

\$0 or 0% of the total cost of this project is funded from current bond issue (including reimbursement).

709270 **University City Subsystem**

This package consists of four segments with a total length of approximately 23,400 linear feet of 6- to 24-inch diameter pipeline. The preliminary alignment for the first segment is as follows: commencing at the Executive Drive and Regents Road tee connection, the pipeline runs south along Regents Road, then east along Arriba Street, then north along Cargill Avenue, and terminates at the intersection of Cargill Avenue and Camino Ticino. The preliminary alignment for the second segment is as follows: commencing at the Regents Road and Nobel Drive tee connection (hook-up from the second segment), the pipeline heads west along Nobel Drive and terminates at the intersection of Nobel Drive and Lebon Drive. Preliminary alignment for the third segment is as follows: commencing at the tee connection at the intersection of Regents Road and Nobel Drive (Hook-up from the first segment), the pipeline heads east along Nobel Drive and terminates at its terminus. The preliminary alignment for the fourth segment is as follows: commencing at the terminus of the turn out from the NSPF/RI 52 pipeline (Package III) at the end of Governor Drive, the pipeline runs west under I-805, then along Governor Drive to Erlanger Street, then south along Erlanger Street and terminates at the western end of Erlanger Street where it will connect to the State Route irrigation system.

\$7,029,883 or 47% of the total cost of this project is funded from current bond issue (including reimbursement).

734001 **University Heights Elevated Tank**

The University Heights Elevated Tank is located at the same location as the University Heights reservoir. The elevated tank has not been used for a number of years. Due to it's historical significance, it is being considered for nomination as a historical monument. If it is named as a historical monument, then it will receive seismic retrofitting and general upgrades. If it is not named as a historical monument, then it will be demolished.

\$0 or 0% of the total cost of this project is funded from current bond issue (including reimbursement).